

1935

3/15

MATHEMATICS

SCHOOL OF ~~XXXXXXXXXXXXXXXXXXXX~~

Academic Organization

MEMBERS

Academic Personnel

FOUNDERS

Corporation

FLEXNER, A.

Biographical

Flexner to Bamberger in Arizona, March 15, 1935.

"Everybody who wants a teacher of mathematics comes shopping to Princeton, just as the people who know what they are after go to L. Bamberger & Company in Newark. Several additional workers have received excellent and promising appointments since I wrote Mrs. Fuld. It now looks as if our stock would be exhausted before the end of the year. I feel quite sure that there is no other institution in the country that can say this of its advanced students."

D, Bamberger, Louis, 1930-1936

1935

3/19

BUILDINGS AND GROUNDS

Facilities

PRINCETON UNIVERSITY

Relations WSAI

✓ SCHOOL OF MATHEMATICS

Academic Organization

MEMBERS

Academic Personnel

VEBLEN, O.

Biographical

FLEXNER, A.

Veblen to Flexner.

At Flexner's invitation Veblen has re-read his letter of April 12, 1934 on space. Makes the following points:

(1) During the present year there has not been any over crowding visible to him in the library in Fine Hall. It may be because workers come and find no space and take their work home.

(2) During the present year Dirac has had an office of his own, but when Wigner went away Dirac moved into his office.

Other members the equivalent of Institute staff, Siegel, le Maître, have been using Gillespie's office when he is not there. The older workers have been given the privilege of the professor's room, and it has been used rather regularly by Walsh and Zariski, occasionally by Moore and Ward, and very rarely by Douglas and Eckert--all Institute members and all men of academic standing outside.

The younger members equivalent to instructors in the University are pretty crowded. The only full-time University instructor at Fine on Princeton faculty, Dr. Wilks, has an office to himself.

(3) There were four assistants assigned to the room next ~~taxkaxnax~~ to Veblen. Lefschetz thinking it was too crowded shifted one to another room, leaving three. Veblen formerly had a separate room for his assistant.

(4) The five professors in the Institute and the associate, Dr. Mayer, all have offices. The rooms assigned to

Alexander, Einstein and Flexner are extremely good.

(5) Summary. We feel our present quarters in Fine Hall to be inadequate not so much because of the number of workers enrolled in the Institute as because of their high quality.

(6) Lefschetz intimated strongly the early part of the year that Veblen talk to Eisenhart about space which he did. His ideas which Veblen concurs with he summarizes as follows:

(A) If possible we should have something in the way of an additional building on the campus close to Fine Hall.

(B) This building should ultimately be adequate for the personnel of the School of Mathematics of the Institute so far as office space is concerned. It would not be necessary to do this in the immediate future, however, nor build adequate space all at one time. (Here did he discuss chemistry and biology? Not apparent except that he was apparently saving Flexner from a blow). Also "it was Eisenhart's and my understanding that

members of the Institute will continue to use rooms in Fine Hall, and that certain members of the University might well use rooms in the new construction." The Department of Mathematics should ultimately have available for itself as much room as there is in the whole of Fine Hall.

(6) A small number of seminar and lecture rooms should be provided.

(8) Common use of library, common room and professor's room should continue.

(7) Veblen says that in planning provision of facilities development in theoretical physics should be contemplated.

(8) He is not submitting an actual estimate of space or of size.

PA 1/8/57, Filed in V Vertical.

1935

4/22

PRINCETON UNIVERSITY

Relations W.O.A.I.

/ SCHOOL OF MATHEMATICS

Academic Organization

See Minutes 4/22/35 pp. 3-4 (Vol. 2, No. 3) on apparently unresolved understanding with Princeton University on financing School of Humanistic Studies. Also Board's desire not to expand other two schools at expense of School of Mathematics.

Memo filed School of Humanistic Studies

1935

4/30

✓ SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

FLEXNER, A.

Biographical

RIEFLER, W.

Flexner to Riefiler, April 30, 1935.

He tells Riefiler about a garden party given on the golf links by him to the School of Mathematics. There were about 80 people present, including those from the University and the Institute. "I could not help but reflect that, if Secretary Wallace were to plugh them under, mathematical salaries throughout the country would rise to a height that would satisfy Elmer Thomas."

D File, Riefiler, Winfield W., 1934-1939

1935

5/2
~~4~~/30

✓ SCHOOL OF MATHEMATICS

Academic Organization

FLEXNER, A.

Biographical

MARSCHAK

RIEFLER, WINFIELD W.

Riefler writes Flexner apologizing for not having studied the Marschak papers, and indicating that he is going to get up to Princeton as soon as he can. He also tells Flexner that if for any reason Flexner "wants to regain your freedom from our compact" you can let me out with honor. The Social Science Research Council which is researching into the proposed Social Security program has begged him to come to it, and gives him reign to research as he will for the good of the program. The financial inducement is very high, and the freedom which he would be offered is, likewise, high.

"It offers one of those rare opportunities where an original commitment can be freely reconsidered--if there is any reason for reconsideration."

Flexner to Riefler, April 30, 1935, also May 6, 1935.

Flexner writes that he and his wife are about to take a Mediterranean cruise beginning May 11, but that he has no desire to escape from his commitments to Riefler. He paints the difference between the project and the opportunity for long-range, undisturbed thought on big problems. "I do not want to let you out either with honor or anything else...There is no need for reconsideration at this end of the line--not the faintest. I should just like to see you spend the next year or longer 'stewing about' to quote the phrase used by one of Walter Stewart's friends.

Riefler to Flexner, May 8, 1935.

I just wanted to give you the opportunity to change your mind. I have told the Social Science Research Council that I am not interested

1935

10/8

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

Flexner attends meeting of mathematics faculty and asks that one of its members be appointed to keep in touch with the others and with him to report on current problems. Suggestion approved. Von Neumann appointed for current year.

School of Mathematics Minutes

1936-39

✓ FACULTY PARTICIPATION *IN DOMINATION*

Academic Personnel

POLICY

Administration

FLEXNER, A.

Biographical

VEELEN, O.

RIEFLER, W.

MORSE, M.

GOLDMAN, H.

EINSTEIN, A.

EARLE, E. M.

Excerpts from File V-1, IAS Faculty Minutes 1933-1950
(Veblen's "History" for Adelstein.)

See FACULTY PARTICIPATION - Academic Personnel *Vertical File "P"*

1936-1944

✓ SCHOOL OF MATHEMATICS	Academic Organization
PHILOSOPHY	Academic Activities
RUSSELL, BERTRAND	Biographical
FLEXNER, A.	

Russell to Flexner, December 28, 1936. Wants to live in America and to return to logic. A number of friends have told him that he might join Einstein and Weyl at the Institute. He has to earn a living. He has a number of people depending on him. He should like to apply to the Institute if there is a vacancy.

Flexner to Russell, January 27, 1937. Obviously greatly flattered. There is no place.

"Institute for Advanced Study began with a somewhat ambitious mathematical group known as the School of Mathematics. Thereupon, the Trustees decided to make a start in certain other directions...the humanistic studies on the one hand and economics

on the other on the theory that the Institute would be a more nearly rounded affair if its entire income was not concentrated in the field of mathematics. I doubt, therefore, whether in the next few years the mathematical group would be enlarged..."

Russell's response, February 8; accepts philosophically, but states that he is usually classified as a philosopher rather than as a mathematician. Sets store by Flexner's statement that if the situation changes he would be happy to be considered.

August 10, 1940, Einstein to Aydelotte. Has been informed Russell would like to come to the Institute (has had a letter from Charles Morris of the University of Chicago dated August 10 urging Russell's continued competence and his great need for money). Einstein said, "I know that our Institute is hindered by its precarious financial situation; but it may be possible to get some special funds to enable this great mind to do his valuable work in Princeton for a few years. If there is any possibility it must be avoided that later generations should

have to tell that this master could not find opportunities to finish his work."

Aydelotte, August 18, responds only that as a member of the Executive Board of Emergency Committee in Aid of Displaced Foreign Scholars he shall raise the question of assistance for Russell. At the same time he asks Veblen what can be done.

Veblen to Aydelotte, August 24, 1940. Russell would fit in the Mathematics Department. Alexander, Einstein and Weyl have great admiration for him. I have known and liked him since 1908. Don't remember von Neumann or Morse saying anything about him.

He is great as a mathematical logician and as a master of the English language. The chief point against him is that he is already past retiring age in years. "If someone came forward with what would amount to a pension for the rest of his days, I can see no reason for not giving him asylum, as it were, in the Institute." But he doesn't see that a foundation would grant the funds for the purpose. Cites Flexner's yearlier rejection, not only because of funds but because he did not think we should

go in for philosophy.

Veblen says Gödel is the one man who now has surpassed Russell in mathematical logic. (Not philosophy).

January 8, 1943, Phoebe H. Gilkyson of Montclair, Pennsylvania, to Aydelotte on Dr. Barnes' casting Russell forth from the Barnes Foundation because he dared to lecture outside. The Russells are hard up, stranded in a country house at Chester Spring, no servants, no money, very frail tires on their car, and somewhat frail in health. No one is friendly; they are too British.

Stephen Duggan, also communicated in distress with Aydelotte about the Russells.

On March 10, 1944, Aydelotte invites Wolman, Moe, Maass, ~~EX~~ the ~~EX~~ members of the School of Economics, and one or two members of the League of Nations to seminars to be conducted at the Institute by Russell. There were two. Aydelotte thanked Russell effusively (April 15) and sent him an honorarium of \$100.
D, Russell, Bertrand

1936-1955

GENERAL (JOURNAL SYMBOLIC LOGIC)

Publications

✓ SCHOOL OF MATHEMATICS

Academic Organization

I. A. S. contributed 100 membership to
Association for Symbolic Logic for publication of Journal
until 1940, when sum became \$75.

D, Journal of Symbolic Logic

1936

1/27

MATHEMATICS

^{orig.}
Academic Activities

HARDY, G. H.

Biographical

LEVI-CIVITA, PROF. T.

CARTAN, ELIE

The Director stated that he had received a letter from Veblen to the effect that these three are attending the Harvard Tercentenary in September and suggested that these three be invited to come to Princeton before Christmas recess at the joint invitation of the Institute and the University at a stipend of \$2000 respectively. This was approved by the Board provided that the budget of the School of Mathematics for 1936-37 would not be increased thereby. (Minutes 1/27/36, p. 14)

1936

5/2
5/5
9/24
10/23

1937

SCHOOL OF MATHEMATICS

Academic Organization

CARNEGIE

Foundations

MORSE, MARSTON

Biographical

FLEXNER, A.

Flexner to Morse, May 2, 1936.

Confirms arrangements made at a conference with Veblen and Morse regarding invitation to be extended by the American Mathematical Society to the International Mathematical Congress to meet in this country in 1940.

If Carnegie Corporation will ~~appropriate~~ appropriate \$7,500, he may succeed in getting Rockefeller to match it. If this fails, the Institute for Advanced Study will set it aside from the mathematical budget, "and hold until it is needed an equivalent sum."

Morse to Flexner May 5, 1936.

The Carnegie Corporation through Mr. Keppel has given informal assurances of \$7500.

Morse to Flexner, September 24, 1936.

The Mathematical Congress at Oslo voted to accept the invitation of the American Mathematical Society to hold an International Mathematical Congress in America in 1940.

Flexner on October 23, 1937, gives positive assurances that \$2500 will be forthcoming from the Institute as an outright gift to the Society.

D File, Morse, Marston, 1933-1945

1936

10/13

SCHOOL OF MATHEMATICS

Academic Organization

STIPENDS

Academic Personnel

GENERAL (ADMISSION FEES)

Finance

HARDIN, JOHN R.

Biographical

VEBLEN, O.

Page 11.

Hardin raised the question of the tuition fee and pointed out how small was the income derived. Veblen explained that the Institute was following not only the practice of Princeton University but the custom in the great English universities which is to regard men with Ph. D. degrees and academic employment as "distinguished visitors" whose presence is beneficial to the Institute. The Director commented that the collection of the fees was a small matter, but the admission of members on a quality basis, and the question of congestion in Fine Hall, and the preservation of the time of the staff for their own studies were the important considerations.

Trustees' Minutes, October 13, 1936

1936

10/23

SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations W.O.A.I.

BUILDINGS AND GROUNDS

Facilities

Excerpts from digests of a typewritten memorandum found in V-2 file with Flexner's initials at the ~~top~~ top. It is apparently a working draft of a paper of Flexner's. The paper discusses problems raised by the extraordinary prominence of the mathematicians assembled at Princeton which it characterizes as "not simple". Princeton consists of three separate but overlapping groups, the undergraduate school, the graduate school which overlaps with the IAS, and the IAS which overlaps the graduate school.

As far as numbers are concerned the limit can be fixed on the undergraduate school on the basis of considerations which do not concern the other two units. As far as the graduate school is concerned a limit on numbers is fixed by the size of the graduate college and also by the consideration that there are other graduate schools in the country that can take care of students not accommodated at Princeton. "Even so the precise number of graduate students that could be admitted depends also on (1) physical facilities, (2) size and quality of staff, etc." Admitting that because of the eminence of the Princeton group more graduate students will want to study mathematics here than elsewhere it is necessary to impose a limitation and the limitation should be one of quality. So much for the University's problem."

As for the Institute it can carry the same difficulty a step further. "It can easily impose certain limitations, as, that (1) it will admit no one who has not achieved the Ph.D. degree, (2) no one who is not beyond the Ph.D. degree given evidence of promise, but with the Ph.D. training comes to a halt..."

The Institute "was founded to offer easy going, informal and stimulating help to men capable of independent work..." The two policies outlined above create two forces which will inevitably bring to Princeton more applications than could otherwise be received. A severe limitation on the numbers which would be accommodated is the precise load upon the teaching. ^{Faculty} This will shift from year to year.

A study of the figures shows that during the current year there are 41 persons registered in the Institute. This does not mean that there are 41 who receive anything like regular instruction or guidance from the members of the Institute's staff. There may be some who attend lectures or seminars, there may be some who do their work mainly with the members of the Princeton Faculty; on the other hand, there are some registered in Princeton who do their work substantially with Institute Faculty. There are also some of the 41 who are registered twice, as for example, the National Research Council, the Commonwealth Fund and C.R.B. Foundation Fellows.

Fine Hall itself imposes a limitation on members. Its space is not indefinitely expandable. Its library facilities are essential to study. It must not be over crowded. Most important of all is the necessity for maintaining an adequate enrollment for stimulating the Faculty of both institutions. "...an able body of students does as much good to the professor as a professor does to the advanced student."

He then suggests a mode of handling the problem:

" (1) ...would it not be well to restrict the number on a qualitative rather than a quantitative basis. whenever

" (2) To emphasize a quantitative limit/there is the real danger that the members of the staff are being pushed unduly hard.

" (3) To procure additional space at the total admitted by the two groups seems to make Fine Hall too populous."

In the latter contingency he suggests that it would be wise if additional space is provided to do so on the basis that the mixture of the two groups should continue without any limitations, physical or otherwise, being placed on it. "Thus cooperation between Thomas and Meyer, between Lefschetz and Alexander, and so forth, ought not to be interfered with or made difficult. And again it is a wonderful thing that the men doing advanced mathematics here glide unconsciously from one group to the other without raising any question either in their own line or in that of their respective staff."

1936

10/31

STIPENDS

Academic *Personal* Procedures

✓ SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOA

Regarding size of mathematical membership.

Filed in Chronological file 10/31/36 or Stipends (Academic Procedures)

File IV-20

1936

11/5

STIPENDS

Academic ~~Procedures~~ ^{Personal}

SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

Veblen to Flexner.

Since it now appears that our quarters in Fine Hall cannot be extended either on the campus or in a building across the street, my opinion of some of our fundamental problems is changed. I will consult with some of my mathematical colleagues.

IV-20

1936

11/7

✓SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

BUILDINGS AND GROUNDS

Facilities

VEBLEN, O.

Biographical

FLEXNER, A.

HARDY, G. H.

Letter from Flexner to Veblen acknowledging his letter of
November 7, filed under Chronological file, November 7, 1936.

1936

11/11

PRINCETON UNIVERSITY

SCHOOL OF MATHEMATICS

BUILDINGS AND GROUNDS

DODDS, HAROLD W.

PLEXNER, A.

Relations WOAII

Academic Organization

Facilities

Biographical

Plexner to Dodds, Nov. 11, 1936.

"Thank you for yours of the 6th [not in file] in regard to the Infirmary and the Hospital. I shall take up the matter at once.

"I note that in the final line you ask my pardon for your presumption. I have read the letter three times and I see no evidence of presumption in it whatsoever. It contains, on the contrary, helpful and wise suggestions bearing on the relations which the Institute should work out with the community. Never hesitate to make any such suggestions that may occur to you, please."

D, Dodds

1937

1/25 1/2x

✓ SCHOOL OF MATHEMATICS

Academic Organization

VON NEUMANN, JOHN

Biographical

Von Neumann has been invited by Council of the American Mathematical Society to deliver the Colloquium Lectures at the annual meeting of the Society in September--the third successive year in which von Neumann has been invited by a learned body to present the results of his recent studies.

Trustees' Minutes, 1/25/37, p. 4

1937

1/25

✓ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL

Publications

The five-year sustaining membership of the Institute in the American Mathematical Society at \$200 a year had run out. It was authorized for five years more at \$200 annually.

Trustees' Minutes, 1/25/37, p. 12

1937

2/4

✓ SCHOOL OF MATHEMATICS

Academic Organization

BIRKHOFF, GEORGE

Biographical

FLEXNER, A.

Flexner to Keppel, February 4, 1937.

Birkhoff wrote an elaborate paper which he finished "two or three weeks ago," and before ~~making~~ undertaking to publish it, he brought it down to Princeton and read it to the assembled mathematical group for criticism and discussion which occurred over two days' period. He went back to re-write it.

Flexner also tells Keppel Sir Otto Niemeyer, ~~Head-of Economics-and-Statistics~~ Director of the Bank of England is arranging a meeting of the head of Economics and Statistics Section to study with Riefler three months.

On February 3, 1937, Keppel informs Flexner the Executive Committee has appropriated \$6,000 for Wade-Gery. There seems to be no D File, Carnegie Corporation, 1932-1939, further reference in file to the request for \$25,000 for each of 3 years.

1937

2/8

/SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

PUBLICATIONS GENERAL

Publications

See for outline of new math series in which I. A. S. and
School of Mathematics collaborated.

V-7

BUDGET
SCHOOL OF MATHEMATICS
HALDANE

Finance
Academic Organization
Biographical

Flexner to Veblen:

Flexner writes that the budget for next year, 1938, is approximately \$300,000 and that the budget for the School of Mathematics, omitting entirely Dirac and Bohr, is \$143,020 which is about one-half of the total income of the Institute. He feels that it is necessary to allow this amount for mathematics but that the sum should not be increased if there is to be any development in the other two schools.

Haldane (?) has been invited for two terms at a salary of \$2500 a term with the Institute and Princeton University each paying half the salary. ~~Kracoske~~ Veblen has suggested this sum to Compton and Flexner feels that it should not be charged to the general budget, "the latter being a point which, as far as I can remember, was not previously raised", but either to the \$30,000 set aside for stipends, or from the amount previously allocated in reserve for Dirac.. He is trying to get money from another source for Dirac and Bohr. Flexner says the mathematicians should arrange the Haldane matter in the way that seems to them best, but that the mathematical budget cannot be increased.

4/12

✓ SCHOOL OF MATHEMATICS

Academic Organization

ASSISTANTS

Academic Personnel

ROSEN

Biographical

MAYER

FLEXNER, A.

In confirmation of what Flexner had told Einstein by telephone: "You have the choice of your assistant absolutely in your own hands and...you are perfectly free to take on someone who has already been granted a stipend or a complete outsider, if you please, and in the choice of your assistant you have thus complete freedom. You do not need the consent of your associates or of my consent. If you would simply let me know whom you wish, Mrs. Bailey will send a formal letter so that the person in question understands ^{the} relationship to you. In previous years you have selected Rosen who also held a stipend, and he was made your assistant.

"Professor Mayer's case is entirely separate and it has no bearing whatsoever on anything you may wish to do in the future."
B. Einstein. 1941-44

1957

4/12

BUDGET
STIPENDS
/ SCHOOL OF MATHEMATICS

Finance
Academic Personnel
Academic Organization

Flemer to Veblen:

"In reference to our telephone conversation this morning I should like to suggest that, if I were in the place of the mathematical group, I should not allow myself before the end of the year to be caught, as the group is caught, by reason of the fact that Professor Weyl has recently discovered a promising candidate for a stipend in the person of a Japanese mathematician. I should set aside a sum of \$4,000 or \$5,000 which I would not touch until, let us say, May 1 or some other arbitrary date, and thus be enabled to take advantage of a surprise candidate like the Japanese mathematician in question.

"I do not believe that the Bergmann case is the real obstacle since in the matter of Bergmann we are doing precisely what we did for Alexander in a similar manner concerning Zippin a few years ago.

"The budget of the Institute is in a different position. It is made up by Mr.s Bailey, Mr. Leidesdorf, and myself a good many weeks in advance of the annual meeting held about the middle of April. It would seem to me a pity to make any one select an assistant, if he has not found the person, prior to that date. I see no reason why, if

one of the mathematicians finds among those receiving stipends someone whom he would like as his assistant, he should not be allowed to have him, no matter if this decision is postponed as late as October 1 or later. We have had irregularities of this kind to manage previously, and there has never been any difficulty about it, but, if I were in your place, I should do with the fund for stipends precisely what I do in the general income of the Institute. I simply will not spend it all on the theory (first) that it will do no harm if a certain amount of money is returned to the treasury unspent and (second) I am in position to take care of a genuine surprise if anything of the first magnitude presents itself in the course of the following year. In other words, don't allocate money to the last dollar just because you have it."

1937

4/19

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HUMANISTIC STUDIES

SCHOOL OF ECONOMICS AND POLITICS

FLEXNER, A.

Biographical

The first two schools may be ~~regarded~~ "regarded as stabilized." Flexner sees no need for any increased expenditure in humanistic studies and mathematics in the near future.

But the School of Economics and Politics needs development to match the other two, and particularly because the field of economics cannot be developed by a single person, even so able ~~as~~ a person as Riefler. But Riefler has opposed the several possibilities for appointment to the School. Flexner hopes that within the next year or two "one or two persons with the proper endowment and experience may be found...I shall not hesitate to bring the matter to the attention of the Trustees, and the same is true of his two ~~associates~~ associates."

He also asks for development of mathematical physics.

Strangely enough, Einstein seems alone in America as the first-rate capacity in the field. There are four or five in Europe, and possibly one or two may be brought to Princeton.

Trustees Minutes, April 19, 1937, pp. 3-4

1937

4/19

✓ SCHOOL OF MATHEMATICS

Academic Organization

A recent two-days conference has been held at the University of Notre Dame. Of the 15 names appearing on the program, 8 came from Princeton, either from the University or from the Institute. Morse directed the discussion at one of the four sessions.

Veblen has been invited to conduct a seminar on the Theory of Spinors at the University of Washington in the first term of the summer quarter under the Walker Ames Professorship of Mathematics.

Weyl will lecture at the Technische Hochschule in Zürich during the summer term.

Trustees' Minutes, 4/19/37, pp. 6-7

1937

5/8

PRINCETON UNIVERSITY
SCHOOL OF MATHEMATICS
EISENHART, LUTHER P.

Relations WOAI
Academic Organization
Biographical

Eisenhart to Flexner, May 8, 1937.

Veblen has taken up with him a suggestion that in the future it might be advisable to have the National Research Fellows enrolled either in the Institute or in the University so as to avoid duplication and confusion. The National Research Fellow should indicate the man with whom he wishes to study and this would constitute the basis for enrollment. The Department of Mathematics of the University approves this policy.

D File, Eisenhart, Luther P.

1937

NOTES

May 31 - June 23

✓ SCHOOL OF MATHEMATICS

Academic Organization

STIPENDS

Academic Personnel

BOHR, NEILS

Biographical

VEBLER, O.

FLEXNER, A.

THERE IS correspondence ~~xxx~~ between the two, and concern the amount of the stipend offered to Bohr. Flexner criticizes Veblen for offering Bohr \$6,000 for one semester, and says it should be \$1,000 a month. Veblen replies that it was Flexner, himself, who set the amount, and Flexner, after reviewing the conversation, gracefully bows and says that this is true. Then he suggests that Veblen in writing his personal letter to Bohr explain that it is the practice of the regular members of the staff who are, likewise, well paid, to do no work outside the Institute.

~~V-File, Flexner, Abraham~~

IV - 4

1937

~~NOTE~~

July 3

July 9

SCHOOL OF MATHEMATICS

Academic Organization

BOHR, NEILS

Biographical

VEBLEN, O.

FLEXNER, A.

RIEFLER, W.

~~DIRAC~~

Veblen replies to Flexner's capitulation on the subject of Bohr's stipend, and asks whether anything has been done about Dirac.

Veblen to Flexner, July 3, 1937.

Dirac has been waiting to go to Russia, but Veblen doubts he should go to Russia considering the circumstances there. Dirac and Bohr are great friends, and it would be fine to have them both at Princeton at the same time. Then he asks a question. Last night he saw in the paper Morgenthal has

asked Riefler to take charge of the gold buying of the government. Does that mean that Riefler would have to be in Washington, or will it be merely incidental to his other activities?

Flexner to Veblen, July 9, 1937.

I have done nothing about Dirac, nor am I until there is an increase in funds. Even so, Riefler has first call on the next million or two.

Treasury "The newspaper account you refer to is totally wrong. Morgenthal pleased with Riefler's account of the situation abroad, offered him a handsome honorarium and an official part-time connection with the University; he promptly declined both on the ground that, (1) he was on a full-time salary (not counting strictly high-grade educational or scientific work out of term), and (2) a Treasury post would put him in politics in appearance, if not in fact. When he reported the interview to me, I wrote Morgenthau reiterating his (Riefler's) and our position. ~~He~~ In reply, M. s *aid answered* that he wished there were more such. I added that anyone in

the Institute was free to say what he thought, but that no
one would be responsible even in appearance for ~~XXXXXXXXXX~~ XIX
'politics'.

~~V File, Flexner, Abraham~~

IV - 20

1937

8/19
8/26

BUDGET COMMITTEE

Finance

✓ SCHOOL OF MATHEMATICS

Academic Organization

FOUNDERS

Corporation

FLEXNER, A.

Biographical

Flexner to Mr. Bamberger, August 19, 1937.

He sends a proposed by-law which comes from Simon which has been worked out over a long period of years by the Rockefeller Institute which he has adapted to the purposes of the Institute for Advanced Study. (Abraham has adapted it). Though the draft is attached to a letter of August 19, that is probably a clerical error; the draft follows:

"The Budget Committee shall consist of three members with the Director and Chairman of the Board, ex officio.

"It shall be the duty of the Director to ascertain from the Treasurer the amount of income which will be available

during the following year. From this sum --- per cent shall be deducted to be held as reserve. Each School shall submit to the Director its recommendations as to its needs and plans for the coming year. These recommendations shall be considered and amended as may be deemed advisable by the Director and the Chairman of the Board. The sums requested by the several Schools and the general budget based thereon as recommended by the Director shall be submitted by the Director to the Budget Committee with power to amend. The budget, as approved by the Budget Committee, shall be submitted to the Board at the annual meeting.

"Unexpended balances at the end of the fiscal year shall be returned to the treasury.

"No professor Trustee shall be a member of the Budget Committee."

D, Bamberger, Louis, 1937-1944

1937

8/19

SCHOOL OF MATHEMATICS

Academic Organization

FOUNDERS

Corporation

VEBLEN, O.

Biographical

FLEXNER, A.

TAUB, ABRAHAM

Flexner to Mr. Bamberger, August 19, 1937.

Sends a letter from the President of the University of Washington (State of Washington) showing how the influence of the Institute has been extended over a wide territory from Princeton to the Pacific Coast. "Last year the President of the University of Washington came to us in order to find a young instructor. The mathematicians recommended a young Jewish scholar, Dr. Abraham Taub, who went out not only to teach mathematics but to see what he could accomplish in stirring up an interest in modern mathematics in that section. Towards the end of the first year he had succeeded in so interesting his colleagues that Professor Veblen was invited

to come out this summer [1937] to give a course of lectures///...
Now as the end of Veblen's work approaches, the President of
the University writes to ask if we cannot continue this sort
of cooperation, the results of which will be in time that the
University of Washington will possess not a branch of the
Institute but its own independent and thoroughly modern school
of mathematics operated by its own funds. You may be sure that
the example set by the University of Washington is not
altogether a novelty."

D, Bamberger, Louis, 1937-1944

1937

9/27
10/8

✓ SCHOOL OF MATHEMATICS

Academic Organization

MORSE, MARSTON

Biographical

WEAVER, WARREN

ROCKEFELLER

Foundations

Correspondence between Morse and the Rockefeller Foundation (Warren Weaver) on the ~~request~~ request of the Institute on behalf of the International Congress of Mathematics through the Institute for \$7,500 for the Congress to be held in 1940. The Institute has pledged the amount of \$7,500, but Morse makes the point to Weaver that if the \$7,500 is paid for this purpose, stipends for foreign mathematicians will be cut by that much since the Institute hasn't got the funds. After that the Rockefeller Foundations grants \$7,500 on condition that the Institute give the Congress \$2,500 which is done.

D, Morse, Marston, 1933-1945

1937

10/2

PRINCETON UNIVERSITY

Relations WQAI

✓ SCHOOL OF MATHEMATICS

Academic Organisation

MORSE, ANTHONY P.

Biographical

Morse permitted to teach Princeton part time while
member I. A. S.--Salary \$500; Stipend \$1300.

School of Mathematics Faculty Minutes.

1937

10/6
10/21

✓ SCHOOL OF MATHEMATICS

Academic Organization

CARNEGIE

Foundations

ROCKEFELLER

MORSE, MARSTON

Biographical

Two letters regarding foundations, 1937, 10/6 and 10/21

Filed in Chronological File under 1937, 10/6.

D File, Morse, Marston, 1933-45

1937

10/11

✓ SCHOOL OF MATHEMATICS

GENERAL

VEBLEN, O.

Academic Organization

Corporation

Biographical

See page 2 of Source below for the effect of Veblen's
teaching at the University of Washington.

Trustees' Minutes, 10/11/37, p. 2

1937

10/11

✓ SCHOOL OF MATHEMATICS
(MATHEMATICAL PHYSICS)

Academic Organization

the question of
Flexner returns to/augmenting the work in mathematical
physics at the Institute, presumably from abroad.

Trustees' Minutes, 10/11/37, p. 6

1937

10/21

BUILDINGS AND GROUNDS

Facilities

SCHOOL OF MATHEMATICS

Academic Organization

For a report from Riefler (or Veblen) October 21, 1937, see Source.

⁻¹⁴
S. I. A. S., Housing Plans Fuld Hall

1938

NOTES

1/17

✓ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL (AMERICAN MATHEMATICAL SOCIETY)

Relations WOI

Correspondence re: I. A. S.'s subscription of \$2500 to the funds for an International Congress of Mathematics to be held in 1938.

January 17, 1938, Richardson, (R. G. D. Richardson) Secretary of the American Mathematical Society, to Flexner.

IV-2

1938

1/21
2/2

FLEXNER, ADRAHAN

Biographical

FOUNDERS

Corporation

✓ SCHOOL OF MATHEMATICS

Academic Organization

Flexner to the founders, January 21, 1938.

"I have a letter this morning from Professor Richardson of Brown University, who is Executive Secretary of the American Mathematical Society, from which I will quote a paragraph which I think will give you great pleasure.

"The Institute for Advanced Study has had a very considerable share in the building up of mathematics in America to its present level and its members will doubtless pay an important role in all of the undertakings of the International Mathematical Congress to be held in September, 1940 in Cambridge, Massachusetts. Not only has the Institute given ideal conditions for work to a large number of men, but it has influenced profoundly the

attitude of other universities. American mathematicians are all proud of what the Institute is doing and are happy to have it share in the festivities connected with our projected Congress."

Flexner to the founders, February 2, 1938.

"I had this morning a letter from Professor Hlavaty, who is a professor of mathematics in the University of Prague. You and Mrs. Fuld will be interested, I think, in the following quotation from it:

'Anybody who is interested in science knows that the necessary condition for scientific work is the personal feeling of freedom and the opportunity to exchange ideas with other people interested in the same questions. Allow me to assure you that I highly appreciate the fortunate arrangement at the Institute which offers to its members both opportunities mentioned above. Personally I am glad to inform you that the time spent at the Institute was very satisfactory for my

scientific work. I have done more in one term here than I could have done in two years elsewhere.

'Moreover, I am convinced that the arrangement which I already mentioned contributes in creating a pleasant atmosphere which enables the members to enjoy and appreciate not only the individual scientific work of each other but also the life itself at the Institute.'

D. Bamberger, Louis, 1937-1944

1938

1/24

✓SCHOOL OF MATHEMATICS

Academic Organization

FLEXNER, ABRAHAM

Biographical

In his Report of the Director Flexner says "For the benefit of the Board and of my own successor"; he discusses the school of mathematics which the Institute has built up. How? "Mathematicians, like cows in the dark, all look alike to me." He goes on to tell about their accomplishments, etc.

Tr. Min. - 1/24/38 - p. 3

1938

1/24

/SCHOOL OF MATHEMATICS

VEBLEN, OSWALD

EINSTEIN, ALBERT

FLEXNER, ABRAHAM

VON NEUMANN, JOHN

WEYL, HERMANN

MORSE, MARSTON

Academic Organization

Biographical

Flexner speaks of how the Rockefeller Institute for Medical Research and the Rockefeller Foundation and the General Education Board combined their efforts in the reorganization of medical education at Johns Hopkins Medical School. "President Gilman's task therefore was the choice of his leader and adviser and having chosen him President Gilman kept his hands off...

"We have in this incident which I was fortunate enough to witness...the key to what has happened in the Institute for Advanced Study at Princeton. After two years, during which I consulted leading mathematicians in this country and Europe, I selected Professor Veblen to play the part which Dr. Welch had played in Baltimore. It was Professor Veblen aided to no slight extent by his colleague at Princeton, Dean Eisenhart, who selected the others. I had never heard of any one of them except Professor Einstein, who as a matter of fact preceded Professor Veblen, though he was not active until after Professor Veblen's appointment. In quick succession the Board appointed on my recommendation Professor

Alexander, Professor von Neumann, Professor Weyl, and Professor Morse, but as a matter of fact my recommendation was nothing but a repetition of the recommendation of Professor Veblen and his associates in the Institute and in Princeton University..."

Tr. Min. - 1/24/38 - p. 4-5

1938

1/24

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN, ALBERT

Biographical

Prof. Einstein, when asked how he explained the eminence of the Princeton mathematical group, replied "Because we are in the fashion. Princeton is the Paris of mathematics." He said that mathematics, as other sciences, was a changing subject and needed to be continually refurnished with new mathematicians with new ideas. Flexner said that the same was true of the other schools.

Tr. Min. - 1/24/38 - p. 8-9

1938

NOTES

1/26

✓ SCHOOL OF MATHEMATICS

Academic Organization

BUDGET

Finance

GÖDEL, KURT

Biographical

FLEXNER, A.

Flexner to Veblen, January 26, 1938.

He says that after the meeting on Monday, he had long conferences on finance, and it is obvious that until business conditions improve, and thus increase the dividends in our present endowment, we shall have to hold in abeyance certain plans which six months ago I'd regarded as likely to be

fulfilled within the twelve-month period. This would mean postponing of the theoretical physicists and taking any salary paid to Professor Gödel from the \$30,000 stipend fund instead of making a further appropriation, for it is simply impossible under existing circumstances to increase the mathematical budget at all. Certain stipends committed by the School of Mathematics are not required because their people cannot come. Flexner has already notified Mr. Leidesdorf

that a \$1500 stipend for Bassi and a \$750 stipend released by Dr. Feenberg will revert to the Treasury.

"When an allocated sum lapses in the course of the year, it goes back to the treasury, a point upon which I think I have made myself clear before. Inevitably, in an institution like ours a demand for funds will be incalculable and there will always be persons who can be substituted for others. I think, however, in the long run, we ~~may~~ will have a higher grade of appointments if we all realize that an appointment of a grant once made is final, and that in the event of its not being used, it is not to go into the second best, but back into the general fund."

V File, Flexner, Abraham

1938

NOTES

1/27

✓ SCHOOL OF MATHEMATICS

Academic organization

BUDGET

Finance

GÜDEL, KURT

Biographical

FLEXNER, A.

VEBLEN, O.

Veblen to Flexner.

He regrets the ~~xxxxxxxx~~ contents of Flexner's letter of January 26, and will take it up with his mathematical ~~xxx~~ colleagues soon. He expresses himself as understanding the treatment of stipends which lapse.

V File, Flexner, Abraham

1938

2/16

BUDGET

Finance

✓SCHOOL OF MATHEMATICS

Academic Organization

Veblen to Flexner:

Veblen thanks Flexner for his letter of 2/14/38 in which he clarifies the situation about Bohr and the misunderstanding over financial remuneration to him. "The positiveness of my impression that Bohr was not on the stipend fund was due to the way in which the matter came up and to the considerations which I think I remember as having entered into the determination of the amount to be paid. I know that you want to deal as generously as possible with the School of Mathematics, and you know that I don't want this to be done at the expense of the best interests of the Institute as a whole."

Veblen says that he agrees with the "general point of view" which Flexner lays down about the way the budget should be handled and that it should be regarded "as representing the outside limit of what can be spent." He suggests that it might be well to let at least one member of each School look over the budget in advance of its adoption for any oversights.

Statement regarding Budget of Estimated Expenses
of School of Mathematics
for the year ending June 30, 1938

School of Mathematics		\$143,159.00
Salaries	\$98,330.00	
Professors, Associates, Assistants,		
Secretary, Librarian	\$97,330.00	
Technical Assistant	<u>1,000.00*</u>	
Teachers Insurance and Annuity Association.....		4,479.00
Occasional Lecturers.....		1,000.00
Stipends		30,000.00
Publications and Subscriptions		3,350.00
Annals of Mathematics	\$ 2,750.00	
Mathematical Publication	300.00	
Subscriptions		
American Mathematical Society	200.00	
Journal of Symbolic Logic	<u>100.00</u>	
Contribution to work in Fine Hall		<u>6,000.00</u>

*\$400 allocated to J. H. Giese for technical work on Annals of Mathematics

1938

6/25

PRINCETON UNIVERSITY
✓ SCHOOL OF MATHEMATICS
EISENHART, LUTHER P.

Relations WOAI
Academic Organization
Biographical

Eisenhart to Flexner, June 25, 1938.

Answers a letter Flexner has sent Eisenhart from London, "We are losing two men and not three, although five had been offered professorships and one an assistant professorship. However, we have a suitable arrangement to carry on next year and we are keeping our situation in a fluid state so as to be in good position to proceed in the future."

D File, Eisenhart, Luther P.

1938

7/24

SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

✓ SCHOOL OF MATHEMATICS

AYDELOTTE, F.

Biographical

FLEXNER, A.

STEWART, W. W.

Aydelotte to Flexner, July 24, 1938.

Handwritten letter. "Heartiest congratulations! You have taken a great step forward in the appointment of Stewart and I am simply delighted that your patience and the success of the Institute have been rewarded by his acceptance. I shall of course speak of it to no one until you make the announcement. But when you ~~write to Stewart~~ write to Stewart I should be glad if you would tell him how pleased I am and how warmly I wish him success and happiness in the Institute faculty."

D File, Aydelotte, Frank, 1930-1945

1938

September

✓ SCHOOL OF MATHEMATICS

Academic Organization

BIRKHOFF, GEORGE D.

Birkhoff spoke publically questioning the advisability of foreign mathematicians coming to the United States of America and competing with American mathematicians. Flexner objected.

I-12

I-12

1938

10/10

GENERAL

✓ SCHOOL OF MATHEMATICS

Public Relations

Academic Organization

Letter economics, p. 3.

Trustees' Minutes, 10/10/38

1938

10/14
10/22
11/23
11/25

✓ SCHOOL OF MATHEMATICS

Academic Organization

STIPENDS

Academic Personnel

VEBLEN, O.

Biographical

FLEXNER

Friendly correspondence regarding stipends for members. Fubini arrangement to get emigre in. Flexner (11/25) says he shall ask Leidesdorf to waive requirement that unspent money be returned to Treasurer. Suggests as to Birkhoff and Smith Veblen is inviting them--should say stipends will be paid ~~if~~ if money is available. Board will act in January--won't know before.

IV-20

1938

11/2

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HUMANISTIC STUDIES

INSTITUTE

Publications

STARR, R. F. S.

Biographical

HERZFELD

Flexner to Keppel, regarding renewal for Starr, mathematics member. He had just received his Ph. D. Keppel had yielded to request for stipend but Starr "not the type of seasoned scholar" that their program is planned to support. Nevertheless gave I. A. S. \$1,800. Flexner asks Keppel for aid in publishing Herzfeld's work \$5,000--the Lowell lectures and another book. Keppel grants \$2000 for publication of lectures--which he thinks is nearest Flexner's heart.

D, Carnegie Corporation

1939-40

PRINCETON UNIVERSITY

PUBLICATIONS (PRINCETON MATH
NOTES)

✓ SCHOOL OF MATHEMATICS

KORSH

ROBERTSON

A. W. TUCKER

Relations WPAI

Publications

Academic Organization

Biographical

Princeton math. notes distributed by Princeton Press:
papers of interest in math unpublished material mimeographed.
Princeton University and I. A. S.

Princeton math series published by Princeton Press made
joint sponsorship of Department of Mathematics and School of
Mathematics. Editors mentioned in Bulletins 9 and 10 School of
Mathematics listed papers and seminars and lectures.

Bulletin No. 9, p. 10

1939-47

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN, A.

Biographical

AYDELOTTE, F.

POLICIES (OUTSIDE WORK, p. 5, 9)

Administration

Einstein's effect on faculty, p. 4.

" " on Board, p. 5.

School of Mathematic's attitude toward Aydelotte, pp. 3-4.

Stewart Interview, 2/16/56

1939

~~NOTES~~

1/30

✓ SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

FLEXNER, A.

Biographical

VEBLEN, O.

Flexner to Veblen, January 30, 1939.

He suggests that the mathematical group should meet to discuss the way in which it can keep up its active relationships with the Princeton mathematical group after Fuld Hall is ready for occupation. He suggests that they bring their conclusions to him for discussion.

He gives two warnings:

(1) We will not be financially in a position next year to provide Fuld Hall library facilities, perhaps not even library facilities of a meagre sort; hence we must utilize the library at Fine Hall.

(2) Furthermore, the functional unity of both groups should be preserved. After Veblen's group consults with him about a solution to these two problems, Flexner would arrange a conference with Dean Eisenhart, and the implication is that they will participate.

-20

IV ~~File, Flexner, Abraham~~

1939

2/3

PRINCETON UNIVERSITY

Relations WOAI

GENERAL

Facilities

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

Memorandum on the Minutes of the School of Mathematics
of the above date regarding School of Mathematics in Fine Hall.

Source above.

1939

NOTES

2/9

✓ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL

Publications

NEUGEBAUER, OTTO

Biographical

FLEXNER, A.

VEBLEN, O.

Veblen to Flexner.

He recites some of Neugebauer's history. He founded the Zentralblatt für Mathematik in Göttingen in 1931 as a professor of mathematics, and from the beginning the Zentralblatt has been published by Julius Springer of Berlin, one of a number published by Julius Springer in various fields of science. "From the beginning, it has served a useful purpose in bringing together in convenient form the suitable criticism all the published mathematical work of the world." It has a distinguished part of editors, a large number of collaborators and reviewers, most of them are, of themselves mathematicians of some distinction. After the

Nazis came into power in Germany, Neugebauer was perhaps the leading historian in mathematics, moved to Copenhagen and continued to edit the Zentralblatt. The Springer Publishing House in Berlin was subjected to pressure by the Nazis. Springer dropped the distinguished Italian mathematician, Levi-Civita, from the list of associate editors without consulting Neugebauer, and replied to Neugebauer's question about it that it was the consequence of anti-semitic degrees in Italy. Springer added that Neugebauer must give him before the first of December a formal engagement that no article by a German author would be reviewed by an emigré. Neugebauer resigned as of December 1, and was followed by a number of the associate editors. A large number of the collaborators has resigned. Springer has replaced Neugebauer by an obscure mathematician named Ulrich.

Veblen resigned from the Board, brought the situation to the attention of Mr. Keppel of Carnegie, Mr. Weaver of the Rockefeller Foundation. Both were interested in Neugebauer as well as in the problem of the Zentralblatt. Neugebauer has been appointed to a Chair in the History of Mathematics at Brown University where it is hoped that he will be able to

continue his researches in this field under favorable auspices. Carnegie Corporation has authorized its president, "to commit the corporation to a grant of not more than \$66,000 to permit the establishment in this country of an international journal of mathematics on the presentation of a satisfactory plan of operation." Veblen says that \$6,000 is to be used in establishing Neugebauer at Brown, and the remaining \$60,000 for the new journal. Neugebauer will collaborate in setting up the new journal, but will not necessarily be its permanent editor.

Veblen told Keppell that the grant for the new journal should be available on a diminishing scale during the first ten years of the journal's existence. Keppell replied that the corporation did not want to prescribe the manner in which the money should be used, but Vaneevar Bush, President of Carnegie Institution, is interested in the project and competent to understand the details.

The American Mathematical Society appointed a committee consisting of professors C. R. Adams, Chairman, G. Y C. Birkhoff,

A. V. Coble, T. C. Fry, M. Morse, and G. T. Whyburn to study the problem in detail, and if they found it desirable to take the necessary steps toward founding a new journal.

Further details in the letter on the estimated cost of publication of the journal, which Veblen estimates will be between \$15,000 and \$20,000 a year. For this, there will be available \$60,000 from the Carnegie Corporation which can legitimately be used up over a period of 10 years. He thinks it would be good to get an equal subvention from the Rockefeller Foundation. Also, there would be income from subscriptions, and some form of subvention from the American Mathematical Society (\$1,000 a year has been proposed, but Veblen thinks \$2,000 a year is more like it), a subvention from the Mathematical Association of America (an organization on the collegiate rather than the University level), and subventions from other mathematical and scientific societies in various parts of the world, and from financial and philanthropic foundations.

V File, Flexner, Abraham

1939

6/27

6/30

BUDGET

Finance

✓ SCHOOL OF MATHEMATICS

Academic Organization

WEYL, HERMANN

Biographical

FLEXNER, A.

Weyl to Flexner, June 27, 1939.

The letter concerns allocation of space in Fuld Hall to mathematicians. Number of members admitted to the School of Mathematics for next year, 1939-40, amounts to 13, not including the assistants. "In no previous year did the number fall below twenty-two. This alone should prove that there will be no difficulty in finding comfortable working room for all."

"You will have noticed that after the heavy reduction of our budget we were unable to grant more than two stipends... to men of non-professorial status. Fortunately two young candidates whom we had to turn down will be sent to the Institute with fellowships from their universities...I think

it would have been very unwise to reject them. We all feel the scarcity of younger men to be a serious handicap to our work. Methods in mathematics are changing so rapidly that we need the stimulus and enthusiasm of young men as much as they need our advice and experience..."

Flexner to Weyl, June 30, 1939.

"Thank you for your kind letter of June 27. I am sorry--extremely sorry--that the number of grants for next year has had to be reduced. We could only have avoided this by a reduction of salaries, and to this I will never consent."

D File, Weyl, Hermann, 1933-1945

1939

9/21

PRINCETON UNIVERSITY

Relations WPAI

GENERAL

Facilities

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

Note Faculty meeting on this date before the term begins. Von Neumann was asked to consult with Flexner about securing aid of the State Department to facilitate Dr. Godel's return to the United States.

Alexander was authorized to negotiate with Dean Eisenhart about keys and telephones for the rooms in Fine Hall assigned to the Institute, and also about the payment of the janitor for work in connection with the Tea Club. (Evidently being continued by Veblen).

Institute rooms in Fine Hall were not to be assigned, but insofar as possible Morse and Veblen should work in Room 108, Einstein and Alexander in Room 109, and Weyl and von Neumann in 111, reserving Room 110 for general use. Thus the Institute had four rooms.

Veblen was asked to negotiate for bus service between Pine and Fuld Halls, and to take up the question of footpaths to Fuld Hall with the Buildings and Grounds Committee.

The Library Committee was told to look up its old report to Dr. Flexner about an appropriation for a mathematics library, brush it off, and present it to the meeting of the Trustees on October 9.

Minutes, School of Mathematics, 9/21/39 (Director's Office)

1939

12/30

SCHOOL OF MATHEMATICS

Academic Organization

GENERAL

Relations W.O.A.I.

IAS had given \$2500 out of stipend fund of School of Mathematics for International Mathematics Congress in U.S.A. in 1940. Congress not held a/c war. 1/27/40 Aydelotte allowed its \$2500 to remain in trust with American Mathematical Society.

D American Mathematical Society

1940-1941

PRINCETON UNIVERSITY
✓ SCHOOL OF MATHEMATICS

Relations WOAI
Academic Organization

Quarterly during the year 1940 the Institute sent two checks to the University: one for \$687.50 for quarterly payment toward the publication of the Annals of Mathematics, the other \$750, "a contribution toward the work in Fine Hall." In the year 1941 this latter amount was diminished to \$500. There are no records of any such payments after the calendar year 1941. (Purpose for which paid after Institute occupied Fuld Hall?)

D, Princeton University

1940-46

PRINCETON UNIVERSITY

✓ SCHOOL OF MATHEMATICS

GENERAL

MEMBERS

Relations WOA I

Academic Organization

Academic Procedures

Academic Personnel

First two Bulletins (1940 and October, 1941) say most of lectures and seminars given in Fine Hall. Last two (1945-46) say some there and some in Fuld. But in the entire period graduate students Princeton and adv. members I. A. S. welcome to all lectures and seminars given by both Princeton and I. A. S. men. Lists of members' papers given also.

See Verifier for inquiries & A's report at Iv 1/26/42. Had to leave Fine Hall for some lectures because out of bounds for inquiries. Must Fuld

Bulletins 9-12 (1940-46)

1940-1951

✓ SCHOOL OF MATHEMATICS

Academic Organization

SIEGEL, CARL

Biographical

Came as member to Institute by invitation Aydelotte cable March 13, 1940 for second time (first 1935 financed by Rockefeller Foundation--lectured 1935). Left Norway April 7, 1940 by ship. Took out first papers December 1940. (Resigned his professorship at Gottingen in opposition to Nazis 1940). Fiancée did not accompany. Aydelotte cabled her October 23, 1940 offering her \$1200 of Siegel's \$3000 stipend. Annual renewals-- he had nowhere else to go--at \$3000 apparently always reimbursed by Rockefeller Foundation (at least 1943-4).

In February, 1945 Weyl inquired of math's outside as to qualifications of Siegel. On February 27, 1945 (See chrono.) prepared report (see file for gem) and especially for Courant's appraisal of his importance to American youth.

While that was pending, he was offered stipend, \$4,000, ~~XXXXXX~~ for year 1945-46 which he accepted conditionally; he wanted a professorship in Germany if he could get back. (3/24/45 S. to A.) 6/11/45 A. to S. offered professorship at

\$10,000 with joint contribution TIAA of \$1625 each for pension of \$4,000 at 65. Siegel didn't accept this; felt his major responsibility to rebuild principal academic life in Germany (6/19/45). Deferred decision until September 27, 1945 when he accepted it.

January 11, 1946 cable from Francis Miller that British hadn't been able to locate Helen Brown. Then Siegel became worried about his mother's health, and Aydelotte corresponded with all Rhodes scholars he could to gain information for Siegel. June 28, 1946 Siegel to Aydelotte. Had intended to marry Helen Brown in 1940 but she wasn't allowed to come to America by the German Government. Now that war is on American Government seems to have inherited some of the Nazi methods--won't allow her in. So he is going to Germany immediately. Has been asked to return to his chair at Gottingen. Has agreed to go for a year to find out attitude of students. Asks leave of absence without salary and help to go.

Weyl and Veblen consulted. Both urged Aydelotte to let Siegel go--help him go--and strive to get Brown to U. S. Said

Brown

to

Brown

Veblen, "The affair is of great importance to the Institute as a whole, for if we lose Siegel and Pauli (the latter may be influenced by what happens to the former) our faculty will be exactly what Flexner left behind minus a number of retirements." (July 5, 1946, Veblen to Aydelotte). Siegel had been naturalized. *Solny received to 15,000 H. 7/11/46*

Aydelotte took up with Executive Committee which authorized full salary for 90 days from time Siegel would leave U. S. Thereafter, Siegel speaks of "wall of official anti-Germanism" in the U. S. and says his only hope of seeing Miss Brown is "in making my escape from this country as soon as possible." (September 2, 1946, Siegel to Aydelotte). By September 20, 1946, Aydelotte urges Veblen to return to Princeton as soon as possible because Siegel's mental condition is serious. Hallucinations of imprisonment. Siegel was in Denmark in early October, 1946 allowed to go to Germany--Göttingen in November.

Siegel lectured at Göttingen and "started a book" with Brown. Wanted to return to Princeton. Brown's departure blocked. They went to Denmark where both became ill, stopping *while* with Harold Bohr.

Siegel and Brown came to Princeton September, 1947 and bought 178 Ewing Street for \$11,500 and asked Institute to lend \$7,500 which it did.

1949/ February 11, 1949 Siegel went to Europe. Went May 31, 1949. On December 19, 1945/ Oppenheimer wrote he would get \$6,000 minimum pension. In May 1950 he again went abroad. (Helen Brown was member only 1947-48).

In 1951 (3/21) Siegel to Oppenheimer. He resigned end of term. Grateful to Institute for sanctuary. Felt he made a serious mistake accepting professorship Institute. But his visit to Germany disappointed him "by the attitude of the person whom I had considered as my nearest friend, and this deep shock brought me back to Princeton."

Doubts he will find peace in Germany but delivering regular courses might be ~~help~~ helpful in finding some sense in continuation of life, in spite of its exterior difficulties, and it might even happen that a gifted young student becomes interested in one of my problems...

To be sincere, I should mention another reason of disillusion, though this may appear impolite. More than half my whole scientific work has been published in this country, during the last 16 years. Quite apart from my own estimation I cannot think that this work is entirely worthless since men like André Weil and Hermann Weyl added some thoughts of their own to ~~me~~ or another of my problems. This contrast with the ~~attitude~~ attitude of the younger American generation of mathematicians from whom I never obtained during all these years a single sign of deeper concern with my own work." Further Siegel alluded to a "mischievous review" of a recent book of his in A. M. S. Bulletin.

Left May 17, 1951.

Papers from file attached to above.

D, Siegel

1940

3/23

S.M.

Debye

~~Wash~~

V to A in Debye + ~~Wash~~

V-3

1940

4/22

✓ SCHOOL OF MATHEMATICS

Academic Organization

BOHR, NEILS

Biographical

HARALD

A cable received by Aydelotte. "Professor Bohr and his brother are deeply conscious of the moral support America has evidenced in these difficult moments but state their general attitude must remain as outlined in the legation's previous telegram until the Danish situation clarifies somewhat."

Below this typed wire in Aydelotte's writing is, "Safe--do not need money--remaining in Copenhagen for present."

The year is not stated in this telegram, and the date of its receipt is written by Aydelotte, presumably it was 1940.

Stayed in Copenhagen to protect himself from German until Jews began to be arrested in 1943, when he finally escaped to Sweden

A File, IAS (Transfer)

1940

5/5
5/8

SCHOOL OF MATHEMATICS

Academic Organization

VEBLEN, O.

Biographical

AYDELOTTE, F.

Veblen to Aydelotte, May 5, 1940.

He alludes to an article in the New York Times about the "uranium affair." When Veblen was in Washington he learned that although this was a military secret the question is being investigated by a committee under direct orders of the President. "This should make it sure that the experimental physicists will get the financial support that they need. But why should we not use it as an argument in favor of the project in theoretical physics which we discussed with Mr. Weaver? We can presumably do nothing further about Niels Bohr for the present-- unless you should write him a letter confirming the offer if he decides to come after some weeks or months--but I am sure Pauli of Zürich would come at once if he were given the chance.

"Do you suppose that Mr. Bamberger would respond to the argument that a group of Class I theoretical physicists in the Institute might

cooperate in an invaluable way with the experimenters in university laboratories and government proving grounds?

"I venture to intrude this question among the many others that I know you have on hand because relevant events both here and abroad are moving rapidly."

Aydélotte to Veblen, May 8, 1940.

He has observed the article and had a "very useful conversation with Bush of the Carnegie Institute" on the same subject which he will report to Veblen. "I do not think we ought to ask Mr. Bamberger for any more money, but I have thought of one or two more possibilities."

A File, Institute for Advanced Study Transfer

1940

5/10

✓ SCHOOL OF MATHEMATICS

Academic Organization

ROCKEFELLER

Foundations

PAULI

Biographical

BOHR

DIRAC

Aydelotte to Bamberger, May 10, 1940.

The Rockefeller Foundation has offered to finance a visiting professorship for Pauli of Zürich. It has already financed a visiting professorship for Niels Bohr, who feels he ought to stay where he is for the time being, but when the time comes when he can no longer do work in Copenhagen he will be glad to accept the Institute's invitation.

Aydelotte is looking for money for a professorship for Dirac of Cambridge University. With these three, plus Einstein and von Neumann the Institute will have the greatest

concentration of mathematical physicists in the world, "and would make the Institute the center for that subject just at the moment when it may conceivably have greater importance than ever before, owing to recent developments in the uranium problem."

D, Bamberger, Louis, 1937-1944

1940

5/13

✓ SCHOOL OF MATHEMATICS

Academic Organization

BIRKHOFF, GOERGE D.

Biographical

Prof. Birkhoff commenting on the study of mathematics in the U.S. said:
on visit to Institute:

"You have it in ~~hand~~ your power here to lift the whole level of mathematical studies in the United States, and if the funds which you are spending on the subject of mathematics are thus enabled to make this \$6,000,000 expenditure more effective, your comparatively modest expenditure will yield a rich return to the entire American educational system."

Tr. Min. - 5/13/40 - Appendix ^{IV} 3- pp. 3

1940

5/17
5/18

PRINCETON UNIVERSITY

SCHOOL OF MATHEMATICS

AYDELOTTE, F.

EISENHART, LUTHER P.

Relations WOI

Academic Organization

Biographical

Aydelotte to Eisenhart, May 17, 1940.

"Professor Veblen reported to the Trustees of the Institute on Monday your generous suggestion that you would be pleased if the courtesy contribution for the use of Pine Hall by the Institute professors were cut from \$3,000 to \$2,000, provided this payment of \$2,000 per year could be assured for five years. The Trustees of the Institute were very happy to agree to this arrangement, and payment will be made quarterly at the new rate in the fiscal year which begins July 1."

Eisenhart to Aydelotte, May 18, 1940.

Expresses appreciation and states that during the past

year there have been four rooms available for the members of the Institute, but Veblen has stated that if it were necessary for the University to reduce the number of rooms to three the arrangement would be adequate.

D File, Eisenhart, Luther P.

1941-1945

WORLD WAR II

Government Relations

PROFESSORS

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organisation

SCHOOL OF HUMANISTIC STUDIES

SCHOOL OF ECONOMICS AND POLITICS

Lowe six weeks in Washington at the end of 1943 as a member of a Special Committee of Historians formed at the request of General H. H. Arnold for the purpose of investigating the effects of ~~xxxxxxxxxxxx~~ aerial bombing on German industry and morale. Also assisted in editing for U. S. invasion troops a handbook with information on the libraries and archives of Italy.

Panofsky, Frankl and Weitzmann participated in the preparation of the maps and information sheets required by the Commission for the preservation of cultural monuments for use by U. S. bombers and artillery men. Each was in charge of specific towns and sections of Germany, and Panofsky was responsible for the revision of the German material in its entirety.

Meritt in 1942, May, Meritt began to work continuously with the O. S. S. in Washington taking leave of absence from the Institute. Was in the Foreign Nationalities Branch of Colonel Donovan's organization as Chief of the Chancery Division. Purpose! to study foreign national groups in the United States with respect to their political aspirations, their possible community of interest, their differences, and the effect of all these upon the war effort of the Allies.

In Washington Meritt was active in following the political aspirations of 36 foreign national groups in the United States. One assignment was to cover completely the foreign language press from the point of view of political intelligence which he did in cooperation with a number of volunteer workers in academic institutions throughout the United States. Other work was of a confidential nature. The Foreign Nationalities Branch operated under the direction of the Joint Chiefs of Staff. He was ultimately given the title of Associate Director and had charge of the activities both of the Chancery Division and the Field Study Division.

He lived in Washington during this time (until the middle of August, 1943) because he had to be in constant touch with the Department of State, the Department of Justice,

the Army, the Navy, the Office of War Information, and other agencies interested in foreign nationalities such as the Board of Economic Warfare, the Treasury Department, the Maritime Commission. In August

In August, 1943, when Governor Lehman, Active Director of the Office of Foreign Relief and Rehabilitation Operations, needed him to establish as quickly as possible an outpost in the Middle East. Meritt then resigned from the Office of Strategic Services and obtained a leave of absence from the Institute until the end of the calendar year. Engaged to go to Cairo as a representative of the State Department. For many reasons not connected with his readiness to proceed upon his new assignment, mainly bureaucratic changes, his departure was delayed. Since he was given leave until October 18 and his actual departure was scheduled finally for about that time, he resigned on October 5 from O. F. R. R. O. and did not make the trip. His war duty apparently ceased at that time.

The School of Mathematics; Oppenheimer was Director of the Los Alamos Laboratories, associated there with Fermi, von Neumann, Bethe, Teller, Bacher.

Veblen on April 28, 1942 became Consultant to the Army Ordnance Department attached to the ballistic research laboratory of the Aberdeen Proving Ground. At the beginning he went only occasionally to give advice, but soon found himself spending four or five days a week in Aberdeen and working on the problems coming up. Had been an ordnance officer in World War I. The work was studying technical problems in a general way advising authorities on procedure and personnel needed for their solution and actually finding and recruiting the key personnel. The Institute continued to support him and this aided him in his position as consultant leaving him independent of the many of the usual military restraints.

About July 1, 1942 he accepted a personal contract with the Navy Department to work with an operational research group on submarine mine warfare. He entered this contract retaining his consultancy with the Army Ordnance authorities and agreeing to a specified time for the latter. The group with which he worked became the nucleus from which operational research personnel was provided to other branches of the service, including particularly the Army Air Force. This work ended July 1, 1943.

Between August 13, 1944 and September 24, 1944, he continued informal work previously engaged in helping

the Armament Officer of the Strategic Air Force in Europe to find scientific personnel to help in his work. He spent that period in temporary duty in Europe attached to the Air Force studying a number of critical problems involving travel in England and France.

In February, 1944, he became consultant and later a member of the Applied Mathematics Panel of N. D. R. C.

Einstein: When asked he gave occasional advice--no continuous work--to the Navy Bureau of Ordnance on various subjects.

Horse: Received citation from the War Department for meritorious service ~~xxxxxx~~ for the Ordnance Department Army Service Forces in the field of mathematical analysis and research. Original studies in terminal ~~xxxxxx~~ ballistics, bomb fragmentation, clearance of mine fields, and ricochet which are of great value to every branch of the armed services and to the Allies; recommendations which have enhanced the tactical usefulness of war weapons and have improved the design of American munitions and for the keen insight and untiring energy with which his exceptional talents have been applied to the war effort.

1942-1945 he wrote with assistance 80 technical reports from 10 to 100 pages in length, in all over 2,000 pages. Among the subjects was the "radio" or "proximity" ~~xxxx~~ fuse which has been called second in importance to the atomic bomb and was perhaps first in direct influence on the prosecution of the war. Horse made the principle mathematical analyses in the Army for the purpose of predicting the advantage before the fuse was made: the optimum height at which it should function, or optimum distance from the enemy plane at which it should burst. This varied with a ~~xxxxxxxxxxxxxxxxxxxx~~ shell, rocket or bomb. According to an authority at the Bureau of Standards, Horse's heights of bursts were built into the fuses for the respective missiles. Various heights which had been proposed by others would, if adopted, have decreased the effects to one-third or less. Horse also wrote on the proper tactical use of this fuse, varying with range, type of weapon, angle of fire, proposed target, etc.

While still an expert consultant of the Ordnance Department, U. S. Army, he was still (October 13, 1945) going to Washington on occasion. As Chairman of the Army Air Forces' Staff Command to recommend future development of an all-purpose fragmentation bomb (secret) he has recently completed a

report on that in collaboration with representatives of the technical branches of the Army and Navy.

During the three years he worked approximately half his time for the Army Ordnance.

He was also Director of the Applied Mathematics Panel of the N. D. E. C. under Conant, for the most part advisory work. His principle work was on the analyses and design of weapons. Earlier work for N. D. E. C. included new methods of mathematical analyses in photogrammetry.

Alexander: Worked with an Operational Research Unit in the Bureau of Ordnance of the U. S. Navy from June, 1942 to late January, 1943. Organized a study of the best tactical and strategic use of undersea mines and to help ~~sea~~ develop defenses against enemy mining operations. The problem was of importance because of the crisis caused by the rapid development of magnetic, acoustic, and other proximity mines. He was detached to work with an operational research unit station at Headquarters of the Bomber Command of the 8th Air Force, U. S. Army, in England, engaged in improving the bombing accuracy of American planes over Germany in October, 1942. Officially a civilian employee of the Navy.

Weyl: April 1, 1943 appointed a special advisor to the National Defense Research Committee. Assigned as consultant to the Applied Mathematics Panel under Dr. Warren Weaver. Carried out some basic research, mostly on the aerodynamics of explosions (shock waves). The work was done at the Institute in Princeton.

Von Neumann: (confidential?) Since 1937 had been connected as a consultant with the Ballistic Research Laboratory, United States Army Ordnance Department, Aberdeen Proving Ground. In 1940 the Scientific Advisory Committee to the Ballistic Research Laboratory was organized by the War Department. It consisted of a dozen members, approximately, including physicists like H. Urey, I. I. Rabi, J. W. Beams, and W. Hull. Its function is to review three or four times each year the functioning of the Laboratory and to make suggestions to the War Department. Von Neumann served with it since its beginning in 1940 and expected (October 11, 1945) to continue after the war. As consultant to the Laboratory, spent about 25 per cent of his time from ~~1943~~ late 1943 up to ~~late~~ early 1944 as consultant in advising the Laboratory ~~ix~~ on its work in aerodynamics. Since early 1945 I have been taking part in advising the Laboratory on its development program on various high-speed computing devices and quite particularly in planning

a new electronic machine.

September, 1941 - September 1942, consultant and then a member of Division 8 N. D. R. C. Work dealt with high explosives. His work mainly in the theory of detonation and the theory of various special high explosive arrangements. This concerned the precise geometrical shape of an explosive charge as used to modify, concentrate or direct the physical effects of detonation.

September, 1942 until July 1943 worked for the U.S. Navy Bureau of Ordnance Research and Development Division, Section for Mine Warfare, on problems "operational research" physical, statistical and more directly military investigations of the use of the weapons under the jurisdiction of this section and of counter measures against them. In connection with this spent January to July, 1943 in England and the last part of 1942 in Washington.

Since the fall of 1943 continued his connection both with Army Ordnance and Navy Bureau of Ordnance as consultant and spent varying parts of his time in working on problems in aerodynamics and the theory and application of high explosives.

Since early 1944 directed a project of the Applied Mathematics Panel at the Institute for Advanced Study. The object was to carry out calculations on ~~some~~ aerodynamical questions of military importance and to develop computing methods likely to be useful in the field. In August, 1945, this project was taken over the United States Navy Bureau of Ordnance and somewhat expanded. Its objective now is to develop new computing methods which are particularly suited to very high-speed computing devices that will become available in the near future.

Since late 1944, a member of Division 2 N. D. R. C., principally interested in studying the effects of explosive blast and of projectile impact on various structures. Took over much of the aerodynamical and high explosive work of Division 8 with which he was previously connected. Expected to continue working on aerodynamical work, particularly in connection with the interaction and reflection of blast waves as results obtained are of purely scientific interest as well. "There seems to be a good chance that the post-war scientific agency of the ~~war~~ government will continue this work in Princeton. Conclusions reached in the work led to direct military applications in determining the conditions under which large and extremely large bombs have to be detonated, classified subject.

Since September, 1943, consultant of the Manhattan District United States Engineers in Los Alamos Laboratory where his work was of triple character: theoretical, in certain phases of engineering, and operational research. Still highly classified and entirely deleted in the Smyth report so that he could not discuss it. Thirty per cent of his time spent at Los Alamos.

School of Economics and Politics, Harle: In February and March, 1941 on a grant from Carnegie Corporation of New York and with authorization of the military and Naval Intelligence Services, made a comprehensive trip to the newly-acquired air and naval bases in the Caribbean region as well as to American territories in that area. Made recommendations on measures to be taken in the formulation of an intelligence and counter-intelligence service in the West Indies and the Canal Zone. Also a report submitted to Major General (then Mr.) Frederick Osborn, which was a principle factor in the establishment of a Special Services Division of the Army of the United States.

July, 1941, summoned to Washington by Major General Milton William Donovan to assist in the organization of the Division of Research and Analysis of the O. S. S. and was until the autumn of 1942 a member of the Board of ~~xxxxxxx~~ Analysts of the O. S. S. "That is to say, of its principle policy making body."

December, 1942 appointed Special Consultant to the Commanding General of the Army Air Forces for the purpose of organizing the Advisory Committee on Bombardment, subsequently named the Committee of Operations Analysts. The Committee was charged with making an overall survey of the industries and resources of the Axis powers to select targets for bombardment to effect most adversely the war effort of the enemy. The report was submitted March 8, 1943 and ~~sank~~ set the pattern of the strategic mission of the Army Air Forces in Europe, and provided the working basis for coordinating bombing efforts of the U. S. A. A. F. and the R. A. F. Additional reports subsequently prepared on Italy and Japan which were likewise accepted as the fundamental studies; served continuously with the Committee of Operations Analysts from 1942-1944 and thereafter with its successor, the Joint (Army-Navy) Target Group.

1944 spring and summer assigned by General Arnold to the European theater of operations, mostly in United Kingdom in matters connected with the aerial bombardment of Europe prior to and immediately subsequent to the Normandy landings.

1944 first half associated with the Division of International Security and Organization of the Department of State whose job it was to assist with the draft of the surrender terms to be offered Germany and subsequently of assisting with the preparation of the Dumbarton Oaks agreements.

During 1944-1945 in collaboration with Professor Harold Sprout, Princeton University, associated with the Secretary of the Navy and in connection with preparation and administration of a program of education for naval R. O. T. C. units for war and post-war periods.

Summer 1945 two months' trip to Germany on matters of interest to the Historical Division of the Army Air Forces by direction of General Baker, Deputy Commander. Given authorization by the Commanding General to write a volume on the heavy bombardment effort of the Army Air Forces in the European theater of operations from 1942 to 1945.

W. W. Stewart, September, 1939-February, 1940, Adviser to the Secretary of the Treasury (full-time); 1940-1943 Adviser to the Secretary of the Treasury (part-time);

Warren, Consultant U. S. Treasury Division of Research and Statistics. February, 1942 - May, 1945, part of the time part-time. Nature of work: consultation of the borrowing program on Treasury relation to the banking system. Department of State asked for Warren's leave from the Institute for one year to serve as a member of the State Department Mission to Austria he said particular reference to the envisaged Tripartite (British, American and Russian military forces) administration of Vienna. Warren was to occupy a key position in the civilian organization. He was granted the leave. Did he go?

Riefler: 1939, September, to January 1, 1940, Assistant to the Secretary of the Treasury. Adjustment of American economy to shock of war. Returned to Institute January 1, 1940.

January, 1941, requested by Vice-President Wallace to come to Washington to draw up first outlines for organization of Board of Economic Warfare. Returned to Institute September, 1941, but continued to act as Adviser to the Board.

March, 1942 to London as Special Assistant to Ambassador Wynant and principle representative of the Board of Economic Warfare in London representing the Board on the Blockade Committee.

Returned to United States, but in August, 1942, appointed Minister and head of Economic Warfare Division in London.

← Concentrated in one division in London operating with the Ministry of Economic Warfare of the British Government, matters pertaining to the ~~economic warfare~~ Anglo-American blockade of Germany, management of the black list in the Eastern Hemisphere, economic and financial negotiations with European neutrals, the gathering and analysis of economic intelligence. This involved intimate and direct liaison with the Air Forces, the European Theater Commander, the American Naval Commander in European Waters.

Resigned and returned to the United States in the autumn of 1944 when the fall of France reduced the blockade problem to a negligible one.

D, War Work Faculty

1941-1945

GENERAL

Academic Procedures

✓ SCHOOL OF MATHEMATICS (pp. 11-13)

Academic Organization

ECONOMICS (LEAGUE OF NATIONS) (p. 20-24) Government Relations

Courses and seminars listed.

Bulletin NAXX22 No. 11, pp. 11-13

1941

11/25

✓ SCHOOL OF MATHEMATICS

Academic Organization

INSTITUTE (BULLETIN #10)

Publications

STEIN, FRED, M.

Biographical

Stein to Aydelotte November 25, 1941.

Found Bulletin No. 10 Institute "all except the mathematics portion which might as well have been written in Sanskrit. I didn't know what most of the words meant."

D, "S1" - "S2"

1941

3/5

✓ SCHOOL OF MATHEMATICS

PRINCETON UNIVERSITY

FLEXNER, A.

Academic Organization

Relations WOI

Biographical

I have turned over in my mind your suggestion about inviting Lefschetz and Dean Eisenhart to lecture at Fuld Hall. I think it would be an admirable idea.

Gest Oriental Library--Vault, Miscellaneous Correspondence, A - L

1941

4/18

NATIONAL RESEARCH COUNCIL

✓ SCHOOL OF MATHEMATICS

MEMBERS

Foundations

Academic Organization

Academic Personnel

Ellis Robert Kolchin, and Sidney Michael Dancoff, mathematics and physics respectively to work with Weyl and Pauli respectively, given fellowships by N. R. C.

D, National Research Council

1941

5/19

SCHOOL OF HUMANISTIC STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

PRINCETON UNIVERSITY

Relations W.O.A.I.

GENERAL

Foundations

GENERAL

Academic Procedures

Report of the Director, Appendix to Minutes 5/19/41

See SCHOOL OF HUMANISTIC STUDIES - Academic Organization

1941

6/5

SCHOOL OF HUMANISTIC STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

MORSE

Biographical

AYDELOTTE, F.

Original of Morse to Aydelotte on his Trustee Report on Humanistic Studies and stressing mathematics as humanistic studies and as an art. Important and valuable.

Filed in Vertical File under "M" for School of Mathematics.

F. A., 1/8/57

1941

7/28

SCHOOL OF MATHEMATICS

Academic Organization

VEBLEN, O.

Biographical

AYDELOTTE, F.

COMPTON, KARL

Aydelotte to Veblen, July 28, 1941. "I had a talk with Karl Compton some time back and he told me of a plan for an institute of mathematics at Princeton which you had worked out some time before there was any idea of an Institute for Advanced Study. I gathered from what Compton said that the Institute in its present form is practically a realization of that plan. Have you any memorandum about it which you could send me or which Miss Blake could find in Princeton? I shall be in Princeton Saturday morning and if you could send a telegram to Miss Blake before then, perhaps she could hand it to me."

Aydelotte says he would like very much to use anything Veblen has on the history of the idea of the school of mathematics. He addresses Veblen at Brooklin, Maine.

D File, Oswald Veblen

1941

7/30
8/26
9/3

/SCHOOL OF MATHEMATICS

Academic Organization

VEBLEN, O.

Biographical

AYDELOTTE, F.

Veblen to Aydelotte with material on School of Mathematics
for Aydelotte report to the Board of Trustees.

Filed in Vertical File under "M" for School of Mathematics.

F. A. papers, 1/8/57

8/26

✓ SCHOOL OF MATHEMATICS
PRINCETON UNIVERSITY

Academic Organization
Relations WOAI

Veblen to Aydelotte on present and future relation to
Princeton. (p. 4)

Vertical File M, Material for Aydelotte Report to Trustees

1941

September (?)

✓ SCHOOL OF MATHEMATICS

Academic Organization

MORSE

Biographical

VON NEUMANN

Their report on mathematics for Aydelotte's report to Board of Trustees.

Filed in Vertical File under "M" for School of Mathematics.

P. A., 1/8/57

1941

10/6

SCHOOL OF MATHEMATICS

Academic Organization

PUBLICATIONS GENERAL

Publications

VON NEUMANN

Biographical

MORGENSTERN

Letter Von Neumann to Aydelotte with manuscript.

Filed in Chronological File under 1941, 10/6.

F. A., 1/8/57

1941

10/14

SCHOOL OF MATHEMATICS

Academic Organization

Report of Director on School . See appraisal p. 2

Tr. Min. - 10/14/41 - Appendix - pp. 1-7

10/14

✓SCHOOL OF MATHEMATICS

PRINCETON UNIVERSITY

STIPENDS

Academic Organization

Relations W.O.A.I.

Academic Personnel

Report of the Director, Appendix to Minutes 10/14/41

See SCHOOL OF MATHEMATICS - Academic Organization

1941

10/24

POLICIES

✓ SCHOOL OF MATHEMATICS

VEBLEN, O.

Administration

Academic Organization

Biographical

yes? — Veblen to Aydelotte commenting on report A making. (Not for Bulletin or Board. query where?) Veblen insists applied mathematics a side issue to Institute mathematicians "extra-curricular"--pure research in mathematics and mathematical physics--concerned with the long-term problems of scholarship rather than with day to day problems of application.

Comment on Morse v.N. rpt on Math at 9A5.

V-3

1942

2/11

1943

4/5

✓ SCHOOL OF MATHEMATICS

Academic Organization

ASSISTANTS

Academic Personnel

EINSTEIN, ALBERG

Biographical

BARGMANN, VALENTINE

The mathematics faculty asked Aydelotte to tell Bargmann to find a teaching job (2/11/42).

4/12/43 Bargmann accepted full-time appointment to Princeton (salary as assistant to Einstein ~~is~~ ceased 4/5/43). Will continue to be a temporary member I. A. S. with possibility of resuming his position with Einstein if job at Princeton proves temporary.

Mathematics Faculty Minutes, 2/11/42 and 4/5/43

1942

5/13

NATIONAL RESEARCH COUNCIL

✓ SCHOOL OF MATHEMATICS

MEMBERS

Foundations

Academic organization

Academic Personnel

Howard Esgt Levi, mathematics, to work under Weyl, and
Luther Irwin Wade, Jr., mathematics, to work under Weyl,
given fellowships by N. R. C.

D, National Research Council

1942

5/18

GENERAL

~~ESSENTIALLY UNCHANGED~~

Educational Institutions

✓ SCHOOL OF MATHEMATICS

Academic Organization

Discussion of impact of war upon American education. War would lessen the number of members in residence at Institute for the year 1942-43. Mathematicians and physicists greatly reduced in number.

Tr. Min. - pp. 34 - 5/18/42

1943

2/15

✓ SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

School of Mathematics Faculty

/Confirmed Army's use of Institute use Fine Hall.

Mathematics
Faculty Minutes, 2/15/43

1943

4/12

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN, A.

Biographical

BARGMANN, VALENTIN

Bargmann accepts a full-time position in Princeton University.
Resigns as Einstein's assistant April 15. He will continue
to be treated as a temporary member of the Institute.

Minutes of the School of Mathematics, 4/12/43, (Director's Office)

1943

4/20
6/8

SCHOOL OF MATHEMATICS

Academic Organization

Director reports accomplishments of School

Tr. Min. Spec. Mtg. 6/8/43 - Dir. Report appended - pp. 1-2

1943

4/20

WORLD WAR II

Government Relations

TRUSTEES

Corporation

SCHOOL OF HUMANISTIC STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

SCHOOL OF ECONOMICS AND POLITICS

See material in file for specific work of schools and professors--fuller than Bulletin accounts (not published, 1943). Also list of professors' war work connections.

A, 10/18/56, Board 4/20/43

1943

6/8

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN, A.

Biographical

WEYL, H.

VON NEUMANN

SIEGEL

Report on work appendix, pp. 1-3. Weyl's discovery--
Von Neumann's Theory of Games.

Trustees' Minutes, 6/8/43

1943

12/21

GENERAL

Government Relations

MORSE, MARSTON

Biographical

WEAVER, WARREN

✓ APPLIED MATHEMATICS

Academic Activities

From Warren Weaver, Chief, Applied Mathematics Panel of the National Defense Research Committee of the Office of Scientific Research and Development, to Aydelotte, December 21, 1943.

An invitation to Morse to join the Applied Mathematics Panel of National Defense Research Committee.

Aydelotte to Weaver, December 22, 1943.

Aydelotte concedes Morse would be useful, but his own researches are developing in a very interesting way; he is at the same time giving four days a week to the Ordnance Department. Aydelotte suggests he might cut down on his work for the Ordnance Department.

Aydelotte to Weaver, January 26, 1944.

A suggestion that one day a month devoted the Applied Mathematics Panel might be satisfactory.

Apparently that was the arrangement finally effected, and acknowledged by a letter from Weaver to Aydelotte February 5, 1944.

D File, Morse, Marston, 1933-1945

1944-1950

✓ SCHOOL OF MATHEMATICS

Academic Organization

PROFESSORS (EMERITI)

Academic Personnel

PARTICIPATION IN ADMINISTRATION

AYDELOTTE, F.

Biographical

OPPENHEIMER, R.

Professor Herzfeld attended no faculty meeting after his retirement July 1, 1944; had attended regularly before.

Lowe, on the other hand, attended after his retirement regularly until the meetinf of October 8, 1947, the second which Oppenheimer as Director-elect attended. Thereafter never did.

Einstein and Veblen, emeritus 1944 and 1945 respectively. Continued to attend regularly until fall of 1950 when Veblen's windfall ceased after five years. Thereafter neither attended except Veblen once by invitation (3/11/52) to present his case against permanent members as intermediate appointments to professorships. See Study Com. Mem (20) 4/2/48 P. 11-12 not to make notes.

*no it didn't
still being
made.*

Aydelotte was evidently still dominated by School of Mathematics. Pauli and Siegel both attended faculty meetings beginning December 13, 1945 after both had been offered professorships. (But Pauli had never accepted permanent professorship; Siegel had in fall of 1945) Pauli continued to attend until he returned to Zurich with Oppenheimer's coming. Policy continued to be uneven. Lowe ceased coming. But Einstein and Veblen attended regularly though professors emeriti until Stewart retired. Perhaps question of continuing attendance of Stewart came up. When Siegel, Veblen and Einstein all ceased attending?

R. O. was informal on other side; Montgomery, Pais and Selberg attended meetings by invitation from November 14, 1950 on, though they became professors ex only July 1, 1951.

Faculty minutes first listed those present at meeting February 9, 1942; previously mentioned only number.

Note: Bulletins listed professors emeriti as they reached 65-- for academic year following birthday.
Faculty Minutes.

1944-56

SCHOOL OF MATHEMATICS

Academic Organization

STIPENDS (

Academic Personnel

MEMBERS (not stipendiates and
fellows and
foundation-supported
members)

With more or less detail from the period 1944 to 1956, the proportion of N. R. C. fellows coming to the Institute has ~~as~~ apparently diminished in relation to those granted by the N. R. C.--probably not in relation to the total number of short-term members admitted to the School of Mathematics. The material comes to be detailed and well listed and accounted from 1947 on, but would be useful in figuring out nature of the membership from 1944 on.

D, Mathematics, Budget

1944

1/31

✓ SCHOOL OF MATHEMATICS

Academic Organization

GÖDEL

Biographical

PAULI

SIEGEL

It was voted to ~~renew~~ renew stipends of Gödel, Pauli, and Siegel at \$4,000, \$4,000 and \$3,000 respectively.

Minutes School of Mathematics, 1/31/44

1944

3/31

SCHOOL OF MATHEMATICS

Academic Organization

WEYL, HERMANN

Biographical

FLEXNER, ABRAHAM

"Dear Doctor Flexner:

"Thank you ever so much for all the pains you took in correcting the English of my little article on Hilbert. I have adopted your suggestions in most places though not in every instance. O course you have a much better ear for the cadence of an English sentence. But maybe my artistic temperament is slightly different from yours, and that demands its rights in spite of my linguistic handicaps!...

"With respect to the future of the Institute I am not too pessimistic. Once the necessary means for salaries and stipends are available and the young mathematicians have returned from service and war jobs, I do not see why our School of Mathematics should not continue to prosper as a center of mathematical research as vigorously, or almost as vigorously, as during the first happy years,-I add 'almost' because we are all ten years older now! But younger men will come to the fore to carry on the tradition. This question of successorship will become acute for theoretical physics with the imminent retirement of Professor Einstein. In my opinion the one thing which could seriously injure the

Institute (provided the finances are in good order) is a policy which would no longer place high scholarship of its staff and members above all other considerations.

"With best greetings,

Sincerely yours,

Hermann Weyl"

W/ File AF

APPENDIX

REPORT OF THE DIRECTOR

October 14, 1941

The School of Mathematics is our oldest department. It began in 1932, while the Schools of Economics and Humanistic Studies were not organized until 1935. Dr. Flexner has explained to the Board his reasons for beginning with this subject and I need not repeat those arguments but wish only to say that they seem to me entirely sound. Since it has been longest in operation, the School of Mathematics illustrates most convincingly the possibilities of the Institute. In the nearly ten years of its work the Institute has admitted more than two hundred and fifty members in this subject and their testimony as to the value to them of their experience, some of which I have myself gathered at first hand, is most satisfactory evidence of the soundness of the plan on which the Institute is based.

The subject is of first-rate importance both in scholarship and in education. Its primary value is as an intellectual discipline and an element in a liberal education. It is, in addition, an indispensable tool for research in all the natural sciences and in the social sciences as well. Mathematics forms an important part of the curriculum of all college and secondary schools. It has been estimated by Professor Birkhoff that American educational institutions spend \$6,000,000 per year in the teaching of mathematics alone. As he pointed out to me, anything which we can do to improve teaching and scholarship in so important a subject will more than justify the modest budget of our School.

Dr. Flexner has in previous reports frequently indicated the extent to which he depended upon Professor Veblen's advice in the organization of the School and the selection of professors. I learned accidentally from President Karl Compton of the Massachusetts Institute of Technology that the idea of a research institute of mathematics on a more modest scale had been in Professor Veblen's mind before the Institute for Advanced Study was thought of. The foundation of the Institute and his own appointment to the staff gave Veblen the opportunity to collaborate in carrying out his original idea upon a more generous and adequate scale. The strength of the mathematics faculty of Princeton University offered an additional reason for beginning with this subject in this place. It offered grounds for hope that the two institutions working together might build a mathematical center of world-wide importance.

I think we may say without fear of contradiction that this hope has been realized and that we have in Princeton, including the staff at Princeton University and the Institute for Advanced Study, plus the continual succession of temporary members of the type of

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Fubini, Gödel, Siegel, and Pauli, the strongest and most widely interested group of mathematicians existing anywhere at this moment. The only other mathematical center of comparable strength in the United States is Cambridge, Massachusetts, taking Harvard and the Massachusetts Institute of Technology together. The other important centers for mathematical studies in the United States are Chicago, Johns Hopkins, Michigan, and Columbia, no one of which, however, is equal in strength and variety to the groups in Cambridge and Princeton. It is in the public interest and it is best for us that these centers and others like them be built up and strengthened as much as possible, particularly in view of the effect of the present war in destroying work of many of the best European centers for mathematical study.

The great European schools of mathematics of this generation were in Cambridge, Göttingen, Rome, Paris, Moscow, and Warsaw. Of these Göttingen, Rome, Paris, and Warsaw have been completely broken up, while the energies of scholars in Cambridge and Moscow have been absorbed by the war and may be crippled by poverty and confusion for years after the war is ended. During the last decade there has been a most promising development of mathematical studies in Japan, but it is too early as yet to judge either its quality or its permanence.

I have sought opinions as to the importance of our group at Princeton in comparison with these justly famous European centers as they were in their prime. Scholars agree that Princeton compares favorably with any of them at their best in pure mathematics but that other centers were probably better integrated in the direction of applications of mathematics to physics and to other subjects. If and when means are available it will be for the Trustees and Faculty to decide whether a broadening of our mathematics school in this respect is possible or desirable. Scholars are discovering every day new applications of mathematics to other fields of knowledge, and the value of these applications is great not merely to the subject considered but also because of the stimulus which they offer to the development of new branches of mathematical science.

I have from my own experience interesting confirmation of the prestige of the mathematical group at Princeton. For a year or two nearly all the best applicants for Guggenheim Fellowships for research in mathematics have been individuals who either have studied in Princeton or who wished to obtain Fellowships in order to do so. Some of the best American and Canadian Rhodes Scholar mathematicians have also found means to come to the Institute to continue their studies.

It is not easy for those of us whose interests lie in other fields than science to understand in detail the work of our School of Mathematics. Apart from being a highly technical and finely differen-

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tiated science, mathematics is also a language, differing radically in grammar and syntax from any other language used by man. Mathematical language is valuable and, indeed, indispensable precisely because it cannot be translated into any other language. For this reason it is possible only to indicate in this report the nature of the work which is being done in Princeton and describe its general tendencies and the spirit and atmosphere in which it is undertaken. Nevertheless, in order to make the record complete I thought it necessary to request from the mathematics faculty summary statements of the work in which each man is at present interested. I reproduce those statements in the language in which they were given to me, for the information of members of the Board who may be able to understand them. If further explanations are called for I regret to say that I must myself decline to be cross-examined and must refer the inquiries to Professor Veblen.

During the last few years Alexander has been working on a presentation of topology from an algebraic-combinatorial point of view. The entire development of topology in the last decade seems to indicate that an important task of generalization and unification can and must be performed in this direction. Work is progressing and it is hoped that eventually a combinatory analogue will be developed to tensor theory which will be applicable to an arbitrary topological space. Certain recent developments in connectivity theory seem to indicate that the desired theory is just around the corner.

Einstein has for the last fifteen years worked on a unification of the theories of relativity and gravitation. This is to be achieved in the form of a general field theory as much as possible in the spirit of the existing general theory of relativity. It is hoped thereby to reach a new understanding of various phenomena which thus far have been described only on an entirely different basis. Outstanding among these is the problem of quanta and those of the electric nature of elementary particles. Many geometrical and field-theoretical avenues had to be explored and while the work is not completed the results obtained so far indicate interesting possibilities. In recent years the collaboration of his assistants, Drs. Bergmann and Bargmann, has proved valuable.

Morse has devoted the major part of the last ten years to the development of a "variational theory in the large." This theory originated for the most part with him, although built on the ancient subject of the calculus of variations. The principal difficulties and major objectives for the theory of simple integrals were developed at Harvard prior to his coming to Princeton and were published in his Colloquium Lectures before the American Mathematical Society. After coming to Princeton the theory was put on a somewhat more abstract basis preparatory to attempting the very difficult extension to multiple integrals. In the last few years this extension has been

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achieved. The results obtained have recently been confirmed in part by others working independently or in collaboration with Morse. The general understanding of the scope of the theory was greatly enhanced by the publication of a book on the subject by two German authors shortly before the war. This book consists of expositions of the simpler parts of Morse's papers on the subject prior to 1937. Papers in press include three written jointly by Morse and Charles Tompkins of Princeton University.

Morse has also collaborated with Professor Hedlund of the University of Virginia in giving a proof of new conditions for topological transitivity and has been engaged in writing a joint paper with Professor George Ewing, who was a member of the Institute during the year 1940-1941.

During the last few years von Neumann's interest in mathematics proper has been mainly in the theory of functional operators and the theory of integration in groups. The former subject is closely connected with quantum mechanics, i. e., the form of atomic physics developed since 1926; it also has bearing on various disciplines in pure mathematics, in particular on group theory, algebra, and the theory of higher spaces. He has also worked on the logical and philosophical implications of the indeterministic point of view necessitated by modern quantum physics. Partly in collaboration with Garrett Birkhoff of Harvard, a system of logic based purely on probability and modifying some of the traditional postulates of logic has been developed. It is hoped that this system will be found to do fuller justice to the empirical situation which the new atomic theory has disclosed. In the course of the last year he has also taken up again and continued earlier work on various questions in mathematical economics, in particular in connection with the mathematical theory of production and of the "oligopoly" which is closely connected with the theory of games. Von Neumann and Morgenstern are at present engaged upon a book on mathematical economics, which promises to be stimulating to scholars in both subjects. I have had the privilege of reading some of the non-mathematical parts of this book and have been deeply impressed by the new fields of speculation which are opened up by it.

In his scientific work von Neumann has been closely collaborating with Professors Francis J. Murray of Columbia and Garrett Birkhoff of Harvard, and at Princeton with Drs. Ambrose and Halmos and Professor Kakutani of Osaka. He has been joined in his defense research work by Professor William W. Flexner of Cornell, who spent the past summer in Princeton.

Veblen has been working for several years on a book which will probably be called Spinors in Projective Geometry, in which an attempt will be made to do justice to the various branches of algebra

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and geometry as well as theoretical physics, which combine to form this particular body of doctrine. He is collaborating with Dr. Givens and Professor Taub, who were his assistants at the time the work started. Professor Taub returned to the Institute for this year from the University of Washington at Seattle, where he has a permanent position, in order to make this collaboration more effective by personal contact. For the same purpose, both Taub and Givens (the latter until now at Cornell University but going to Northwestern) have worked with Veblen all summer. As a result, the book is now definitely organized and there is good reason to expect that it will appear in the near future. Several other men, including van Stockum (now in the Canadian Air Force) and deWet (now at Cape Town) have worked with Veblen's group on this subject, and particularly on its applications to theoretical physics. In accordance with the general policy of the Institute, all of these men are mature scientists rather than beginners. They came from widely separated parts of the world. Presumably this bringing together of such men to work on a common program for a while and then to depart to their several stations with renewed enthusiasm is about as much as the Institute can profitably attempt to do in mathematics.

Although Weyl cannot and should not be put down as an algebraist only, his major interest in the last years has been in that field, and he has made it a particular subject of his endeavor to see that the two important disciplines of algebra and group theory are adequately represented in the School of Mathematics. He has also attempted to break the ground for number theory, a branch of mathematics which does not seem to have met so far with as much interest in this country as it deserves. A book on The Classical Groups, Their Invariants and Representations, the first in the "Princeton Mathematical Series," for which he enjoyed the close cooperation of such gifted assistants as Richard Brauer and Alfred H. Clifford, and the opening volume of the "Annals of Mathematics Studies," on Algebraic Theory of Numbers, are fruits of his endeavors in this direction. During the present year the theory of reduction under arithmetical equivalence has received much attention because Siegel has just arrived at a wealth of new profound results concerning these problems. Gordon Pall, who came to the Institute as a Canadian Guggenheim Fellow, is writing a book on the subject, and some of Weyl's own latest research has been in this field.

Weyl considers an important part of his mathematical activities to be a seminar on current literature, which this year he continued jointly with Professor Chevalley of Princeton University. The idea is to have the members of the seminar report on recent papers of outstanding interest and thus to counteract the dangerous tendency toward too narrow specialization by covering in the same seminar all fields of mathematics. Next term Weyl hopes to be able to do something in the direction of applied mathematics, particularly in hydro- and aero-dynamics.

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The building up of our new mathematical library has required much of Weyl's attention during the last year. He believes we can be justly proud of what has so far been accomplished under difficult circumstances. Much of the credit should go to Weyl's assistant, Alfred Brauer, who is an expert librarian in the field of mathematics and has given as much of his time and energy to this job as he could give without unduly neglecting his own research work.

Aside from their real work with the foundations of mathematics and mathematical physics, with the discovery and development of these principles which give to mathematics deeper harmony as an art and greater power as a science, the members of our School of Mathematics have been active in publications and in national defense. The Institute pays a subsidy each year to support the "Annals of Mathematics," of which Professor von Neumann is one of the editors. Professor Weyl is a member of the editorial board of "The American Journal of Mathematics." Professor Veblen was the leader of a group of scholars who have recently launched the new journal "Mathematics Reviews," which is already felt to supply a need not heretofore filled in giving prompt publication in condensed form to new discoveries. Under the title of the "Princeton Mathematical Series," the Institute joins with Princeton University in the publication of mathematical books of the highest order. Professor Morse is an editor. Morse has also aided in the launching of the newest mathematics venture, "Mathematical Surveys," supplementing other publications with short expository treatises. All the members of our School of Mathematics are on the editorial boards of various international mathematical journals.

Professor von Neumann is chief consultant on ballistics of the War Preparedness Committee of the American Mathematical Society and the Mathematical Association of America, member of the Scientific Advisory Board of the Ballistic Research Laboratory at Aberdeen Proving Ground, and member of one of the sections of the National Defense Research Committee, now part of the Office of Scientific Research and Development. Morse, as President of the American Mathematics Society, has led in the mobilization of American mathematicians for various kinds of expert scientific work for the Army, the Navy, and the defense industries.

The greatest need of the Institute in its relations to mathematics is an increase of funds for stipends to workers. The total amount available each year for this purpose is now considerably less than the amount available during the first years of the Institute. For the last half dozen years we have had at the Institute each year between fifty and sixty candidates for stipends in the School of Mathematics, while the number of stipends which it has been possible to grant has gradually decreased from something over twenty in 1935 and 1936 to about ten at the present time,

- 7 -

Of all the sciences Mathematics is nearest to the arts. I have frequently been assured by mathematicians that the pleasure they get from a fine demonstration is partly aesthetic and that the elaboration of a new chain of mathematical reasoning seems to those who create it to be partly artistic achievement, something like the writing of a poem. It is noteworthy that as between two proofs of a theorem mathematicians will prefer the one which, as they say, is more "elegant," a term which has primarily an aesthetic rather than a logical significance.

It is a striking fact that creative mathematicians think of their subject as an art as well as a science. Perhaps the best analogy is with architecture, which in its highest forms combines use and beauty. Both art and science on the highest level are projects of the creative imagination, and the likenesses between them become more significant than the differences. The curious connection between mathematical and musical ability has been observed since Greek times; it is found more frequently among higher orders of ability than among lower.

Science and art are two methods of apprehending reality which owe their distinctness to the limitations of the human mind, which is unable to grasp the whole significance of an object or event and at the same time see clearly all the details. Those minds which can transcend ordinary limitations can to a greater extent combine the two points of view. Many useful but humdrum scientific workers never rise to the creation of a significant scientific hypothesis, which is a feat of imagination analogous to artistic creation. It has been said that to the mind of God science and art would be one: He apprehends the broad significance of the universe and at the same time understands clearly all its details. It has furthermore been said that the Creator of the universe, whatever else he is, is also a mathematician. Unquestionably all scholars in all fields have their flashes of creative insight when they mold whole systems of knowledge and chains of reasoning into order and symmetry. But it seems as if the very abstractness of his conceptions and the rigor of his thinking give this power to the mathematician in an unusual degree and claim for his subject the position so frequently assigned to it, that of being the mother of the sciences.

1944

5/18

NATIONAL RESEARCH COUNCIL

✓ SCHOOL OF MATHEMATICS

MEMBERS

Foundations

Academic Organization

Academic Personnel

Robert Schatten, mathematics, to work under von Neumann,
given fellowship by N. R. C.

D, National Research Council

1944

11/28

✓ SCHOOL OF MATHEMATICS
PRINCETON UNIVERSITY

Academic Organization
Relations WOAI

Mathematical seminar just resumed--eagerly attended by
Department of Mathematics and Institute School of Mathematics.
(P. 4 Aydelotte's report November 28, 1944).

A, 5/17/56, File No. 2

✓ SCHOOL OF MATHEMATICS

Academic Organization

SALARIES

Academic Personnel

VEBLEN, O.

Biographical

FLEXNER, A.

EISENHART

Veblen to Aydelotte, December 11, 1944.

Veblen explains how the salaries of Alexander and von Neumann were determined when they were appointed. He tells Aydelotte that the Institute was willing to take either Lefschetz or Alexander and left the decision up to Eisenhart as to who should occupy the Fine Chair of Mathematics at the University. Dr. Flexner felt that when Lefschetz was chosen for the Fine Chair and received the Fine salary, Flexner did not believe that Alexander should receive more than that; therefore, he received the same amount. Weyl was still hesitating about taking a position. Von Neumann was appointed a little later, and Flexner thought "with justice" that he could not be placed in a higher bracket than Alexander and therefore there was the same understanding about his

appointment as about Alexander's.

"So far as I can recall, nothing was put into writing in either case. The assurances which Dr. Flexner gave to me and to both Alexander and von Neumann were discussed by us frequently at that time and were regarded by us as completely binding."

1945-1946

✓ SCHOOL OF MATHEMATICS

Academic Organization

PAULI

Biographical

Appointment to the faculty of the School of Mathematics authorized at the meeting of the Executive Committee June 5, 1945.

Appointed to Visiting Professorship in the School of Mathematics October 19, 1945.

In view of offer of \$12,500 by Columbia University, Institute offered him \$15,000 effective July 1, 1946.

October 18, 1946 the Director reported to the Trustees that Pauli has decided to resign ~~as a permanent member~~^{his 2nd year} at the Institute and will remain in Zurich.

The Faculty of Mathematics meeting November 29, 1946 discussed offering Pauli a permanent membership, but it was thought that this sort of arrangement might be misunderstood outside and would not increase the chances of Pauli's returning to the Institute.

Minutes, Executive Committee, March 19, 1946

195-24
JEWETT FELLOWSHIPS

✓ SCHOOL OF MATHEMATICS

HENRIK JEWETT, FRANK B.

VEBLEN, C.

Foundations

Academic Organisation

Biographical

A pamphlet, "The Frank B. Jewett Fellowships in the Physical Sciences" filed in Vertical File under "F".

Three Jewett Fellowships at I. A. S. 1948-9: Karplus, Glum, and Thomas.

D, Jewett, Fellowships

1945-1955

CONTRACTS (?)

Government Relations

✓ SCHOOL OF MATHEMATICS (Spec. funds
for math. studies (Exp.))

Academic Organization

FINANCE GENERAL

Finance

Income Received

	1945	\$ 15,504	
	1946	29,233	
Fiscal	1947	41,820	
	1948	88,781	(Sched. 13)*
	1949	122,206	(Sched. 12)*
	1950	95,904	(Sched. 12)*
	1951	146,385	
	1955	134,000	

* Government contracts include A. E. C.

Treasurer's Reports

1945

1/5

BENEFITS

Academic Personnel

SALARIES

SCHOOL OF HUMANISTIC STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

SCHOOL OF ECONOMICS AND POLITICS

Copies of correspondence between Flexner and professors on salaries and pensions. Submitted to Haas by Aydelotte January 5, 1945. Valuable--not otherwise available--some instances Flexner's position as of 1945 and Aydelotte's--Valuable--See file.

(file # 56)

A, 10/16/56 Mat. for Trustee Committee on Institute Policy

1945

1/8

✓ SCHOOL OF MATHEMATICS

Academic Organization

MOE, H. A.

Biographical

AYDELOTTE, F.

See Moe's letter to Aydelotte sharply disagreeing with Aydelotte's position that Alexander and von Neumann should be put on same salary (and retirement basis) as Einstein and Veblen. But not Morse. Veblen's letter to Aydelotte of 12/11/44.

A, 10/18/56, Mat. for Trustee Committee on Institute Policy

1945

2/2

/SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

OPPENHEIMER, R.

Biographical

PAULI

Report of School of Mathematics (Weyl) on them as professors--
Important. Presented at School of Mathematics Faculty meeting
February 2, 1945.

? Authored for report which was prepared & submitted to I.C. 6/15/45
315

v-67

1945

2/2

SCHOOL OF MATHEMATICS

Academic Organization

NOMINATIONS

Academic Personnel

✓ PHYSICS

Academic Activities

The primary purpose of the meeting was to discuss the appointment of new members to the Mathematics Faculty: one mathematical physicist, one mathematician. Agreed to notify the other Schools that we were about to make nominations and should urge them to do the same.

Einstein and Weyl appointed as a subcommittee to draw up a report on the possible candidates: (possible candidates): Pauli, Rabi, Fermi, Oppenheimer, Dirac, Gamow, and Bethe, with the group favoring Pauli as the most desirable candidate.

Siegel head and shoulders above the other/^{possible}mathematicians.

The group discussed securing a permanent position for Gödel as Associate similar to that held by Mayer. No decision

Minutes of the School of Mathematics, 2/2/45

1945

2/2

SCHOOL OF MATHEMATICS

Academic Organization

PAULI, WOLFGANG

Biographical

OPPENHEIMER, R.

SIEGEL

Minutes of a meeting of the professors of the School of Mathematics held February 2, 1945.

Shows Einstein, Morse, von Neumann, Veblen, Weyl and Alexander present.

Einstein and Weyl were appointed as a sub-committee to draw up a report on possible candidates for a chair in mathematical physics. The names of Pauli, Rabi, Fermi, Oppenheimer, Dirac, Gamow, and Bethe were discussed. "The group favored Pauli as the most desirable candidate."

"As for an appointment in pure mathematics, a committee of

Weyl and Alexander was appointed to prepare the report on Siegel who was considered by the group as head and shoulders above all others considered.

V-8 School of Mathematics Minutes, 1935-1950

1945

March

✓ SCHOOL OF MATHEMATICS

Academic Organization

APPOINTMENTS

Academic Personnel

A suggested list of theoretical physicists and mathematicians, including Schroedinger, Fermi, Dirac, Bohr, etc., and mathematicians: Artin, Gödel, Zariski, ~~Whitney~~ Whitney, etc.

A, 10/18/56 School of Mathematics, Faculty appointments

The file other wise consists of year-by-year accounts of the stipends and stipendiates of the School of Mathematics, and, obviously, Veblen's plading the memorandum in this file was a little bit of calculated prejudice.

At the time of the memorandum, Pauli was 44 years old, Oppenheimer, 40. The final comparisons, and this memorandum does not attempt to recap the specific qualifications of each man in theoretical physics, is that "Pauli's command of the mathematical apparatus was, is, and will probably always be far the greater. Regarding qualitative insight, O. since he reached his full stature, comes closer to P. In inspiring other physicists, they are on the same level, perhaps O. even a little above P. as far as their influence on experimentalists on the spot is concerned. But certainly O. has made no contributions to physics of such fundamental nature as Pauli's exclusion principle and analysis of the electronic spin. Physicists outside our own circle agree with this opinion, or express themselves even more strongly to the effect that Oppenheimer is one in a series of younger physicists of nearly equal rank--the names of Gamow, V-7, School of Mathematics, Miscellaneous (Memo. continued)

Bethe, Wigner and Heitler are mentioned--but that they are all several degrees lower than Pauli in originality, depth and lasting influence."

The memorandum here quotes from Professor Rabi:

"Pauli is more suitable because of his great powers of critical evaluation of a problem and his fundamental point of view.

'As a close neighbor of the Institute for Advanced Study I can ~~only~~ say with the greatest sincerity that I would regard the appointment of Pauli to the chair of theoretical physics in the Institute as a tremendous help to myself and to the whole community of physicists in the metropolitan region. He would be a great integrating influence and by his presence and example greatly raise the intellectual level of theoretical physics in this community. Oppenheimer, although he would be a great addition to the community, is not sufficiently above the others to have the same effect. Pauli for many years has been the conscience and the criterion of truth for a large part of the community of theoretical physicists.'

In the ultimate conclusions, a letter from Dirac in
Cambridge sums it up with, "Pauli has the stronger claims."

V-7, School of Mathematics, Miscellaneous

✓ SCHOOL OF MATHEMATICS

Academic Organization

COMMITTEES

~~ACADEMIC EXPERIMENTAL~~

PAULI, WOLFGANG

Biographical

SIEGEL, CARL LUDWIG

OPPENHEIMER, J. ROBERT

"As the head of two nominating sub-committees, Professor Weyl read prepared statements recommending the appointment of Professors Wolfgang Pauli and Carl Ludwig Siegel for chairs in the School of Mathematics, with Professor J. Robert Oppenheimer as an alternate for Professor Pauli. Dr. Aydelotte stated that he was strongly impressed with the recommendations and would give them most serious consideration."

Minutes of the School of Mathematics, 3/5/45

1945

4/28

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

PRINCETON UNIVERSITY

Relations WOAII

SMYTH, HENRY D.

Biographical

VON NEUMANN, JOHN

Not called by him for purpose

Tentatively discussed suggestion of Smyth and von Neumann that Professor Enrico Fermi be offered a chair in Theoretical Physics under the joint auspices of the Institute and University with the understanding that his salary would be paid by the Institute and that laboratory facilities would be furnished him by the University. Aydelotte present questioned whether School of Mathematics might care to delay its nominations of Pauli and Siegel for consideration of the Fermi matter, but the

School of Mathematics decided to push the two nominations and at the same time explore the Fermi proposal.

Minutes, School of Mathematics, 4/28/45.

1945

5/12

✓ SCHOOL OF MATHEMATICS

Academic Organization

General

Relations WOAI

WEYL, HERMANN

Biographical

DRESDEN, ARNOLD

Dresden to Weyl, May 12, 1945.

He sends him a final version of a report of a conference between eight mathematicians, including Dresden and Weyl on the need for better ~~math~~ preparation in all levels of education for the demands of the post-war period to bring about changes in the mathematical educational procedure which have been long overdue. There is only a carbon copy of this report. It is in the file and should be consulted.

"Mathematics plays a fundamental role in our civilization. It sets the standard of objective truth for all intellectual endeavors; science and technology bear witness to its practical usefulness. Like language and music it is one of the primary manifestations of the free creative power

of the human mind, and it is the universal organ for world-understanding through theoretical construction. Mathematics must therefore remain an essential element of the knowledge and abilities which we have to teach, of the culture we have to transmit to the next generation. Only he who knows what mathematics is and what its function in our present civilization is, can give sound advice for the improvement of our mathematical teaching."

The report proceeds to a discussion of the evils which were discussed in the conference which seem to lie primarily in the teachers, their preparation, their development as human beings and as mathematicians, and the aids they use in their instruction, chiefly the textbooks:

(1) The teachers are recruited from the normal schools and from schools of education, "which unfortunately too often disregard the fact that only those should teach a subject who know thoroughly the field to which the subject belongs."

(2) The method of appointment of teachers of mathematics leaves much to be desired. There is a lack of standards of

scientific and cultural preparation. Local school boards are not capable of pursuing the considerations needed for proper selection.

(3) The domination of the textbook field by the commercial interests of publishers and of authors; the dominance of tradition in curriculum. It is suggested that somewhere there should be inserted an elementary course in number theory, from which many young students would derive greater satisfaction than from the traditional course in trigonometry.

(4) The lack of scientific discipline in the schools, the acceptance by teachers of slovenly work and slovenly thinking is detrimental to education. "A main task of the teacher is to help his pupil cross the bridge from the idea to its technical execution."

(5) Lack of continuity between highschool work and work in college, both with regard to the content of the courses and to the points of view, is manifest. There

is also an overemphasis of control by examinations and grades over the college student which deprives him of the chance to catch "the fire of inspiration when he is intellectually receptive for it."

(6) The work expected of candidates for the Ph. D. frequently fails to provide for the broad mathematical training and the cultural background which are necessary for a college teacher of mathematics.

(7) The absence of provisions for adequate adult education in mathematics is deplorable. This need is enhanced when one considers the return of veterans.

The constructive aspects of the discussion were listed as follows:

(1) Careful planning and writing of textbooks in mathematics for elementary schools, high schools and colleges by competent persons. It would be desirable to have a commission appointed to make a careful study of this question.

(2) A competent commission should be established to examine textbooks carefully as they are published. The books as published should be reviewed and rated by such a commission. "The methods used by Consumers Research could be studied to advantage.

(3) The establishment of a Fellowship in the Association (analogous to Fellowships in the Actuarial Society,) should be granted to applicants, particularly the younger members of the profession, either on the basis of examinations by the Association or on the basis of conspicuous achievement as a teacher, would help to set up high standards for teachers of mathematics in the schools. It would be necessary that a commission study the possibilities in this direction, exploring the likelihood of obtaining cooperation from the secondary schools, both private and public, and from teachers, actual and prospective.

(4) Graduate schools should recognize the training of college teachers as one of their major responsibilities. The needs of such persons should be clarified. It is not necessary

that they should go through the "painful profess" of writing a research dissertation. Perhaps a new degree should be established, or the requirements for existing degrees should be modified perhaps. Prospective college teachers should attain a higher level of mathematical understanding than is now the case, and they should be encouraged (as a minimum of attainment) to preserve such a level throughout their professional life. "The development of every science, not excluding mathematics, is determined by ideas, attitudes, valuations, which do not become explicit in the system of science itself, while the results of our scientific labors in their turn react on and modify the repertory of ideas and convictions which rule the active conduct of our lives. A teacher of mathematics is in greater need than a research mathematician of keeping ~~his~~ his mind open to this give-and-take between systematic science and the whole of our human existence."

(5) Adult education in mathematics should be provided for individuals beyond college age who want to do work of college character. Such groups would include high school

teachers who wish to prepare for a fellowship qualification and college teachers who want to retain their literacy and extend their knowledge in mathematics.

(6) More attention should be paid to the historical and philosophical background of mathematics. In the detailed study of the various fields, the historical development should take an important place. "The contributions which mathematics can and should make to culture should be made clear to the student of the subject." The teachers of mathematics should not be narrow in their knowledge.

The committee expresses the hope that commissions may be appointed to study the matters presented in this report. They go on to say:

"In some respects the evils from which our profession suffers present much analogy with those which existed in the medical profession forty years ago. It would probably be worth while for some of these commissions to study the procedures used by Dr. Abraham Flexner in his studies of medical education which led to far-reaching reforms in this field.

"It would also be useful to become acquainted with measures taken in foreign countries, particularly in England and Russia, for the betterment of mathematical education."

Signing the report were: H. W. Brinkmann, Richard Courant, Arnold Dresden, J. R. Kline, E. J. Miles, Cystein Ore, Hans Rademacher, and Hermann Weyl.

Weyl to Dresden, March 13, 1945.

He very tactfully makes a couple of suggestions:

"I do not fully agree with you when you say in the preamble that the significance of mathematics for educational purpose depends to a large extent upon the degree to which it is made to contribute to human culture. Even Ortega puts the training of the professionalists and the search for truth side by side with the transmission of culture."

He also suggests that in Section III, Paragraph 4,

a sharper line should be drawn between the teacher of mathematics and the research mathematician.

"In Paragraph 6 of Section III, I should like to see the second and third sentences canceled. I cannot see the contributions of mathematics to culture as a subject for 'careful study' in a normal mathematical curriculum, and we should not stress history too much. Mathematics itself and its problems must remain the hard core of any such curriculum."

He goes on to say, "We do not claim for mathematics the prerogative of a Queen of Science; there are other fields which are of the same or even higher importance in education. But mathematics sets the standard of objective truth for all intellectual endeavors; science and technology bear witness to its practical usefulness. Besides language and music it is one of the primary manifestations of the free creative power of the human mind, and it is the universal organ for world-understanding through theoretical construction. Mathematics must therefore remain an essential element of the knowledge and abilities which we have to teach, of the culture

we have to transmit, to the next generation. Only he who knows what mathematics is and what its function in our present civilization, can give sound advice for the improvement of our mathematical teaching."

"Too little emphasis is laid on the understanding of simple ideas, too much on the mechanical performance of complicated techniques...

"Since the various subjects offered in an all-round educational program are interrelated, and our culture itself is not composed of a number of isolated pieces, it is hardly a sound procedure to let the student, especially at the high school level, pick his courses according to his own shims; take a little Latin and then drop it, etc. A large amount of compulsory continuity and coordination is desirable.

"On the other hand our system of spoon-feeding and perpetual control by papers and exams, gives the college student too little freedom for ever catching the fire of

inspiration from a superior teacher at the time when the intellect is ripe for freedom. (Later is too late.)"

And, again, he says, "Synthesis, concentration and consolidation of knowledge, rather than expansion of knowledge, seem to be their specific function. Since science is man made, the development of every science, not excluding mathematics, is determined by ideas, attitudes, valuations, which do not become explicit in the system of science itself, while the results of our scientific labors in their turn react on and modify the repertory of ideas and convictions which rule the active conduct of our lives. A teacher of mathematics is in greater need than research mathematician of keeping his mind open to this give-and-take between systematic science and the whole of our human existence.

"The question whether a new degree should be established, or whether the requirements for existing degrees should be modified, remains open for discussion."

W (Weyl) File D1-

1945

5/19
5/22

PARTICIPATION IN ADMINISTRATION

Academic Personnel

NOMINATIONS

SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

✓ SCHOOL OF MATHEMATICS

TRUSTEES

Corporation

Comment: At the meeting of May 19, a five-year appointment to Goldenweiser without stipend was deferred on objections from unnamed members of the Faculty that they didn't know his work.

At the meeting on May 22, Haass and Wood were present invited by the Director. The Viner appointment presented by Baric was opposed by Einstein on the ground that Siegel was being passed over, and that he had a more inventive mind than Viner. "Veblen, however supported Professor Baric's motion" for the appointment of Viner." Haass asked whether economics could not claim to have an inventive quality comparable to that of mathematics. Then Morse spoke for Viner and the nomination was approved.

Albright nominated by Goldman and Weyl expressed his approval because Neugebauer approved.

At the end of the discussion, Neess said he approved the new method of Faculty discussion of appointments before the Trustees received their nominations. He hoped the Board of Trustees might be better informed about some appointments in the future than it had been in the past. He excluded the economists because they had been thoroughly discussed with the Board of Trustees and he understood it. He even opined that the School of Economics and Politics might make bigger contributions to the future than the others.

Weed made a statement that no one had demonstrated to him why any appointments were necessary now, and why, if they were, the age pattern hadn't been better considered, and why were they made in the fields already existing, and why not in a new field. He referred to justifying the appointments to him.

Neess asked whether if mathematics was the School that gave prestige to the Institute, three appointments should not be

made in that field alone.

Maass expressed continuing confusion as to how a Trustee could be certain that he was approving the right appointment as between the three Schools, and there was no satisfactory answer. He was striking at inbreeding and self-interest. The Minutes are wryly humorous.

That the spectacle created by Maass and Weed was fully appreciated by the Faculty, it expressed its appreciation particularly for the "fairness and clarity" with which the proceedings were recorded by the Secretary, Professor Heritt. (September 17, 1945 Faculty Meeting).

Faculty Minutes 5/22/45

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FERMI

SCHOOL OF MATHEMATICS

EXPERIMENTAL PHYSICS

Biographical

Academic Organization

Academic Activities

Copy from Mathematics Faculty Minutes, 1935-52, book in Director's Office.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics with Dr. Aydelotte June 2, 1945

Present: Dr. Aydelotte, and Profs. Einstein, Morse, von Neumann, Veblen, Weyl and Alexander, Secretary.

Meeting called to discuss to what extent the Institute should become involved in questions involving Experimental Physics.

100
Von Neumann: In all probability, Fermi and Oppenheimer will soon be leaving full-time war work. Doubtful whether they will return to former university posts. Oppenheimer reported not happy in Berkeley and considering offer from Harvard, and according to Rabi also offer from Columbia. Fermi is still attached to Columbia but very seriously considering offer from

Chicago.

Fov
Aydelotte: Smyth thinks U. S. Government will continue to support experimental work generously. Should work be done in U. S. Government laboratories or at picked universities? Aydelotte and Smyth suggest Government laboratories, with scientists from universities working on leave of absence.

Vs? /
Einstein: Fears that emphasis on such projects will further ideas of "preventive" wars.

vs?
Morse: Doubts whether scientists will ever be able to run such projects.

Vs?
Aydelotte: Points out that Government will probably insist on some "classification" for such projects.

How secret will they be?

KW
Von Neumann: Government may subsidize some experimental and theoretical work in physics on a straight scientific basis.

It might maintain regional laboratories, each serving a group of universities.

F_v

Veblen calls attention to expenses for engineering which will put much work beyond means of private universities, hence the necessity for regional laboratories. In view of these laboratories, the Institute could afford to go in for physics on a grander scale than previously contemplated. In future, private funds may be insufficient to provide for scientific research. Congress may vote large appropriations and leave detailed allocation of funds to universities in hands of scientific committee.

F_v

Von Neumann: In future, Government may play the role of the great foundations. May see the need for independent research in addition to strictly military projects.

v_s

Einstein: Insists on importance of independence and emphasizes dangers of secret war work.

F_v

Von Neumann and Morse: If we had a man like Fermi on our faculty we would stand a better chance of getting a share of appropriations.

Fav Horse: How far will Princeton University gamble on a joint project to get Fermi?

do VON Neumann: Smyth says Physics Department approves offering laboratories and that approval of Bodde is expected.

vs Einstein: This means that the Institute would pay the salary and that the University would get the man. Precedent might develop into a common practice on part of University.

Fav Veblen: Many University supporters might complain that the University was providing the equipment for the benefit of a man belonging essentially to the Institute.

Fav Von Neumann: Impossible for Princeton to match the salary ceilings of Chicago, Columbia, etc. If we make arrangement with University we should impose condition that Fermi do research work only.

Fav Horse: The Government is inclined to let contracts to establish institutions that have organization and equipment,

rather than to start entirely new undertakings. Fermi question should be considered from the general point of view, taking all possible eventualities into consideration (i.e. whether or not we get Government funds).

F_{or}

Veblen: Situation analogous to that when we set up Mathematics group at Institute, building on group already at University. At the University we now have a nucleus consisting of Wigner and Wheeler. By building around these men we might try to obtain leadership in this area.

A. B. S. D.
to 25 7/16/45

Aydelotte: Are we on the verge of great new discoveries in physics, or is it merely a question of engineering applications?

Weyl: It is never possible to guarantee such a thing in advance, but further progress in atomic physics certainly requires great apparatus which is best obtained in the manner discussed.

F

Einstein: Agrees with Weyl that such a procedure will probably lead to important scientific progress. He considers it desirable. However, we must keep in mind not to spend our energy on engineering applications.

Veblen: Mount Wilson is a great engineering establishment, yet it serves the purposes of pure scientists such as Russell, etc.

Aydelotte: We don't know what prospects are for the future. At present most Government projects seem to be of a purely engineering character.

Morse: Our first consideration should be to get good men, but good men are liable to gravitate to points where funds are available. On the other hand, it would be dangerous to engage on a program that would make us dependent on continuing Government support.

Veblen: There is a good chance Trustees would be interested in plan. They may even get too much interested, to the detriment of other things.

Von Neumann raises question of automatic computation machines. There may be opportunity for us to take on directing role.

Veblen: Fluid mechanics. There is a proposal to have a panel on this subject, no doubt with military support. Work has been done for Army in this field by Bleakney and Harvey at Princeton. Problems of mathematical interest are involved.

James W. Alexander

Secretary

1945

9/17

PARTICIPATION IN ADMINISTRATION

✓ SCHOOL OF MATHEMATICS

GENERAL

VON NEUMANN, JOHN

Academic Personnel

Academic Organization

Government Relations

Biographical

Von Neumann appeared at the first meeting for a long time, and spoke of the necessity of retaining certain mathematicians who were working with him on an unexpired Navy contract; brought up the question of making them members of the Institute. He was referred to the Mathematics Faculty.

see fac

since Jan 1945

It

Faculty Minutes, 9/17/45

9/26

SCHOOL OF MATHEMATICS

Academic Organization

APPLIED MATHEMATICS

Academic Activities

VON NEUMANN, JOHN

Biographical

Masani (member 1946-48) suggested by von Neumann for membership 1945-46 but voted down stipend and directed no future commitments to him be made. E. C. P.? Navy contract?

School of Mathematics Faculty ((Minutes?))

1945

9/26

✓ SCHOOL OF MATHEMATICS

Academic Organization

PARTICIPATION IN ADMINISTRATION

Academic Personnel

PRINCETON UNIVERSITY

Relations WOI

OPPENHEIMER, R.

Biographical

Voted membership 1945-46 for Dr. Saloma Bochner,
Albert W. Tucker, Valentine Bargmann (Princeton).

Voted offer chair to Oppenheimer--von Neumann and Einstein
appointed draw biographical report for presentation to
faculty. (This followed, apparently, the conclusion of
proposal of Institute and Princeton jointly to offer Fermi
appointment. See minutes 6/2/45).

School of Mathematics Faculty Meeting

1945

10/3

✓ APPLIED MATHEMATICS

Academic Activities

VON NEUMANN, JOHN

Biographical

AYDELOTTE, F.

Aydelotte to Strauss, October 3, 1945.

Asks him to attend the Trustees meeting October 19 to consider the most important issue: von Neumann's project for building an electronic computer. Both M. I. T. and the University of Chicago have made very attractive offers to von Neumann for this project, but he would prefer to stay here if we can offer him an opportunity to carry out his plans. Aydelotte favors it, and hopes money can be obtained from outside sources. He has written to the Rockefeller Foundation and thinks that support might be found from some government department, "But von Neumann is a little troubled about such a plan because he wants to use the device for purely scientific purposes, whereas the Government departments of course are principally interested in practical applications."

D, Strauss, Lewis L.

1946-1951

✓ SCHOOL OF MATHEMATICS

Academic Organization

E. C. P.

Academic Activities

Institute has undertaken to construct an electronic computing device to cost estimated \$300,000 of which Board will give no more than \$100,000. Balance Sheet shows \$12,511 in process of construction by 1947, \$118,275 by 1948, \$322,810 of which \$96,905 was for buildings and equipment, by 1948, \$365,952 (w/o building equipment), by 1950 \$599,063 gross in Project #1, and beginning of Project #2, on which \$13,444 is shown .

By 1951	#1	\$587,496
	#2	<u>229,024</u>
		816,521
Less land & Buildings		<u>184,487</u>
Net projects		\$632,034
Liability column shows:		
I. A. S.		\$100,000

Liability column shows:

I. A. S.	\$100,000
Others:	
#1	556,138
#2	<u>176,000</u>
	\$832,138

*See notes - Finance for
yrs 1946-55*

Treasurer's Report, Exhibit A

1946-1948

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

E. C. P.

Memorandum Dyson to Chandra Sekhar, October 20, 1954.

"School of Mathematics has a permanent establishment which is divided into three groups, one consisting of pure mathematics, one consisting of theoretical ~~physicists~~ physicists, and one consisting of Professor von Neumann. Von Neumann originated in 1946 and has since directed our computer project. The computer project built and operates a fast digital computer, the cost of the machine and of almost all of the staff being paid by government money and not by the Institute. Rather by accident it has turned out that the most active users of the machine have been meteorologists... Under the leadership of Dr. Charney, have set themselves a task of understanding the theoretical basis of meteorology by solving numerically various forms of the hydro-dynamical equations of the atmosphere and comparing the results with observation.

They have had a good deal of success in making short-ranged (24 hours) weather predictions by these methods, as a consequence of which the Government is very willing to pour money into the project. Von Neumann and Charney are anxious not to get too deeply involved with practical applications, in order to concentrate on the more difficult problems of understanding large-scale and long-range atmospheric motions... The meteorologists would prefer to be on the Institute establishment on the same footing as the physicists and mathematicians in order to be free of any sort of obligation to produce useful results on a short-term basis..."

✓ Purpose of the Institute is to carry on long-term academic research in a scholarly atmosphere. The original purpose of the computer project was to be the nucleus for a group of applied mathematicians who would use the machine for research of this kind, either for investigating physical problems or for developing the mathematical theory of complex non-linear systems of equations. The question is now, whether meteorology is an appropriate subject for the Institute

to support in a major and permanent way, and if not, whether there are other branches of applied mathematics which would be more appropriate.

Questions posed:

(1) To incorporate the existing meteorology group into permanent Institute organization,

(2) To extricate the Institute from direct support of the computer and let the government run it as a practical and meteorological project,

(3) To let the meteorologists go elsewhere and keep the computer for the Institute in the hope of establishing a school of fundamental research in some other branch of applied mathematics.

Dyson asks for advice.

D, E. C. P., Considerations, Future of

1940-55
/MATHEMATICS

Academic Organization

AMERICAN MATHEMATICAL SOCIETY

Relations W.O.A.I.

Ayres, W. L. (Associate Secretary of American Math. Society) to Veblen:

"During the period 1940-45 the dues of the Institute for Advanced Study were \$200 a year. I know you will be glad to know that during 1940-45 the average number of pages published annually from the Institute was 283.83. This increased productivity of the members of the Institute necessitates the Society's requesting the Institute for Advanced Study to raise its annual dues to \$775. Would you be willing to take this matter up with your administration and obtain its consent to increase the annual dues by \$575? The first payment of the dues on the new basis will become effective on January 1, 1947. Under the new dues, the Institute for Advanced Study would have the privilege of receiving the Transactions and the Bulletin and nominating 38 members to the Society." (IAS met increase RO to Society 1/18/49, File D)

File D Amer. Math. Soc.

1946

1/28

✓ SCHOOL OF MATHEMATICS

Academic Organization

RESEARCH

Government Relations

VON NEUMANN, JOHN

Biographical

General Groves has been notified by Dean Peagram of Columbia that the Institute joins in a request that a regional laboratory in nuclear physics be set up in the vicinity. Air mail letter January 22, 1946, Aydelotte to von Neumann read to the Committee.

D, Minutes Standing Committee of the Faculty, 1940-1946

1946

3/16

CONTRACTS

✓ APPLIED MATHEMATICS (E.C.P.)
ROCKEFELLER FOUNDATION
PRINCETON UNIVERSITY
RCA RESEARCH
GOLDSTEIN, H.H.
BIGELOW, J.
BURKES, A.W.
POMERENE, J.

Government Relations
Academic Activities
Foundations
Relations W.φ.A.I.

Biographical

See Report on E.C.P.

Navy giving \$100,000. Rockefeller Foundation contribution uncertain. RCA assisting with new type vacuum tubes. Title in IAS absolutely.

Exec. Comm. Mtg. 3/19/46 Appendix

1946

5/14

✓ SCHOOL OF MATHEMATICS

Academic Organization

MATHEMATICS (METEOROLOGY)

Academic Activities

CONTRACTS (NAVAL)

Government Relations

Von Neumann explained the proposal for a Naval contract to further research in dynamic meteorology for the purpose of putting this subject on a better theoretical foundation, in view of the probability that high-speed computing devices will make it possible to attack problems which have been heretofore inaccessible. The project involves bringing to the Institute a small number of theoretical meteorologists who will work under von Neumann. Office space to be afforded by enlarging the proposed computing laboratory. The discussion considered the effect of such activities upon the progress of mathematics and upon the general atmosphere of the Institute. The personal views expressed ranged from that of Professor Siegel who, in principle, prefers to compute a logarithm which might enter into his work rather than look it up in a table, through that of Professor Morse who considers this project inevitable but far from optimum, to that of Professor Veblen who simply-mindedly welcomes the advances of science regardless of the direction in

which they seem to be carrying us. In spite of this variety of personal points of view, it was agreed that the Institute should go forward with the project as proposed.

Veblen
Secretary.

Minutes, School of Mathematics, 5/14/46

1946

5/13

✓ SCHOOL OF MATHEMATICS

Academic Organization

E. C. P.

Academic Activities

MORSE, MARSWON

Biographical

PANOFSKY, ERWIN

ZWORYKIN

Aydelotte discussed Zworykin's plan for scientific control of the weather which would involve calculations by the Electronic Computer based on measurement of the amount of radiation emanating from the ground. He reported the Navy Department wanted to sign a contract with the Institute for approximately \$30,000 for two or three years to develop these studies. S. M. faculty would discuss the matter at their meeting May 14, 1946. Asked for comments, Morse opposed primarily an empirical rather than theoretical science. (Study of the weather). And it belongs in an engineering school rather than in an institution devoted to the liberal arts. If it is embarked upon it should be separated from the Institute as such; otherwise

the Institute might have a permanent weather forecasting station on its hands. Panofsky recalled primary consideration in the development of the E. C. P. was to solve theoretical problems, not practical ones.

D, Minutes Standing Committee of the Faculty, 1940-1946

1946

5/20

✓ SCHOOL OF MATHEMATICS

Academic Organization

E. C. P.

Academic Activities

METEOROLOGY

MORSE, MARSTON

Biographical

Standing Committee: Morse, Panofsky, and Riefler met with Aydelotte and Bamberger May 20, 1946. Aydelotte reported School of Mathematics had on May 14, 1946 voted that the Institute enter into a contract with the Navy Department for meteorological research in connection with the E. C. P. This work will be carried on in the Computer building which will be expanded to accommodate the additional staff. Morse pointed out that "with the exception of Professors von Neumann and Veblen, the members of the mathematics faculty approved of this step with some reluctance." Consensus: development of the E. C. P. seemed a point to ~~mathematics~~ meteorological research as the next logical step, and although this research might lead to new theoretical discoveries in the field of mathematics and physics, the work carried on at the Institute by Professor Siegel, for example, was of more fundamental importance. Some members of the

faculty believed that the great contributions to learning were made by individuals not by institutions and raised the question whether the Institute should not give more attention to promoting the scientific work and influence of men like Siegel. "This view is of course at variance with the attitude held by society in general, which gives to projects devoted to the improvement of the material welfare of man a political and social significance greatly out of proportion to their intrinsic value."

D, Minutes of the Standing Committee of the Faculty, 1940-1946

1946

5/27

✓ SCHOOL OF MATHEMATICS

Academic Organization

POLICIES

~~Academic~~ Administration

GENERAL

Publications

E. C. P.

Academic Activities

Meeting Bamberger, Morse, Panofsky and Riefler with

Aydelotte. Consensus was that a paragraph describing the E. C. P. project should be included in the chapter on the School of Mathematics but that the names of the Computer personnel should not appear in the list of Institute members. "Members of the Computer staff are, after all, employed to do a specific job and are not invited to the Institute to pursue research of their own choosing." But they should be listed with their addresses in the staff list. Aydelotte ~~six~~ said he would discuss the question further with von Neumann and report back to the Committee at its next meeting. ~~No evidence.~~ *It was carried*

in Bull Oct 1946 as suggested by 2nd subcommittee

D, Minutes of the Standing Committee of the Faculty, 1940-1946

1946

8/22

TRUSTEES

Corporation

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN, ALBERT

Biographical

INFELD, LEOPOLD

VEBLEN, O.

AYDELOTTE

Veblen to Aydelotte on failure of Flexner to make Einstein a trustee--(check carefully with actual record of incident cited--Einstein could have had members and assistants given if School of Mathematics had taken care of it properly. Quest p. 302-4. Dishonest of Veblen)

(Above information from V-3 File)

(The following information is taken from Mathematics Faculty Minutes of the dates indicated).

April 20, 1936 Mathematics Faculty. Infeld-\$300 one term,
\$600 year.

October 22, 1936. Infeld among those discussed for stipend.
Action 7 mathematicians, 1 physicist or biologist; Pauling,
Cal. Tech. (V)

February 25, 1937 School of Mathematics Minutes. Infeld
placed on contingent basis and following a long list of
approved first choices \$30,000. (Explanation of Veblen's
dichotomy?--check through minutes).

December 12, 1936. School of Mathematics Faculty
reserved action Infeld 1937-38 while ~~xxx~~ reserve set aside for
Dirac \$3,000 Pauling refused after meeting.

October 2, 1937 School of Mathematics stipendiates 1937-38 not
including Infeld. Had he gone to McGill?

Infeld member 1936-38. Who paid for last year? See Dulon - L+D.
Sources given in text. *Invited. Give Physics to support Infeld.*

1946

10/14

✓ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL (ANNALS AND A. M. S.)

Publications

AMS

The Institute's annual membership of \$200 was raised to \$775. Aydelotte resisted, saying that he felt this method of financing mathematical publications was unsound in principle. He thought that the great foundations or the American Philosophical Society should make this sort of contribution. But funds have not been available from these sources. It was accordingly recommended by the School to the Director that the request should be met.

Von Neumann reported a crisis in the finances of the Annals of Mathematics. Publication then a year and one-half in arrears. It was agreed that the Institute should make an increase of \$500 in the subvention on condition that Princeton University would equal it.

Minutes, School of Mathematics, 10/14/46

1946

10/14

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

OPPENHEIMER, R.

Biographical

SM - Faculty approved Oppenheimer's nomination for chair in
theoretical physics September 26, 1945. It was then presented to full Fac
a Fo Board.

On October 8, 1946, the faculty considered again
appointments in the field of theoretical physics, hopefully to be
shared by the University. The matter was deferred until the
next meeting, October 14 when Aydelotte brought it up as the
main business. A new appointment in theoretical physics
was needed. The gist of the discussion was that the two leading
men among the young theoretical physicists were Richard Feynman
and Julian Schwinger. Feynman was invited as member some months
ago, but had just taken on a position as Assistant or Associate
Professor at Cornell and did not come because he must devote
himself to his new duties. Schwinger was Associate Professor at
Harvard, and has been asked to a full professorship at
Columbia. Schwinger was decided to be the stronger candidate.

Aydelotte raised the question of bringing distinguished theoretical physicists from other parts of the world to Princeton for periodic terms of service; for example, one term every two years. He suggested Niels Bohr, Dirac, Pauli, H. A. Kramérs, I.I. Rabi, and Schroedinger, the latter two added by the faculty.

Veblen recalled that Flexner had entered into such an arrangement with Dirac some years ago, but that this had lapsed during the war.

Aydelotte reminded the group that Oppenheimer had been approved by both the School of Mathematics and the faculty as a whole, so that it would be perfectly proper for him to bring it up at this week's meeting of the Trustees. Sentiment was that it would be better first of all to settle the question about the appointment of a younger man. Oppenheimer regarded as a first-rate candidate, but some question about political activity.

It was felt that the appointment of a younger man is more important than a rotating arrangement with a visiting group of distinguished men, and Aydelotte said that the two things were

by no means mutually exclusive.

Veblen as Secretary and von Neumann reported informally about a conference which they had had with Harry Smyth about the possibility of a joint offer to one of the young theoretical physicists by the Institute and the University, a term at each place. . Smyth said the University could hardly go about \$8000 a year for a full appointment. This would mean \$4000 from the University and \$4000 from the Institute. Veblen interposed his own note that it would be perfectly in order to enter into an arrangement with Feynman without delay and negotiate with Schwinger for a full professorship.

Minutes, School of Mathematics, 10/14/46

1946

11/4

PARTICIPATION IN ADMINISTRATION

Academic Personnel

APPLIED MATHEMATICS

Academic Activities

CONTRACTS

Government Relations

RESEARCH

Academic Procedures

opinion on

Morse asked for a statement of ~~asked~~ a possible of the Office of Naval Research to supply funds for pure research provided that the problem to be studied and the project were sponsored by a member of the Faculty of the Institute and a contract made by the Institute. Panofsky questioned the advisability of cooperation in research with a military organization. Von Neumann, Veblen and Morse expressed the opinion that the need of freedom of research in mathematics was understood by the people who were handling the problem for the Government. Professor Morse said that we were already doing it in the E. C. P.

Faculty Minutes 11/4/46

1946
1947

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~~3~~ 2/3

✓ SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

FEYNMANN, R. P.

At first meeting Aydelotte announced Feynmann had been offered joint appointment by Princeton University and Institute. (There was no Faculty consideration of the matter that I have observed, despite the new policy of notice). On second meeting Aydelotte suggested Feynmann had refused (for the next three academic years).

Faculty Minutes above dates

1946

12/13

PARTICIPATION IN ADMINISTRATION

PRINCETON UNIVERSITY

✓ SCHOOL OF MATHEMATICS

FEYHMANN

Academic Personnel

Relations WPAI

Academic Organization

Biographical

Aydelette announced that appointment as Associate Professor
Theoretical Physics had been offered by Princeton University
with offer from I.A. S. of membership for three years.

This was not previously cleared with full faculty; although
it had been submitted by to Executive Committee and approved.

Faculty Minutes

10/18

✓ SCHOOL OF MATHEMATICS

Academic Organization

VISITING PROFESSORS

Academic Personnel

MEMBERS (Permanent)

Director's Report on return of Siegel, Pauli to their native countries, and suggestion that several European scholars be invited to IAS as visiting professors: Bohr, Dirac, Creation of new category of Permanent Members suggested.

Tr. Min. 10/18/46 Appendix I pp. 7-8

1946

11/4

PARTICIPATION IN ADMINISTRATION
SCHOOL OF HUMANISTIC STUDIES
SCHOOL OF ECONOMICS AND POLITICS
✓ SCHOOL OF MATHEMATICS

Academic Personnel
Academic Organization

Heritt nominated Thompson. Morse and Veblen expressed themselves as willing to take immediate action. Earle and Weyl advocated postponement. Nomination deferred.

Faculty Minutes 11/4/46

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11/18

PARTICIPATION IN ADMINISTRATION

Academic Personnel

THOMPSON

Biographical

SCHOOL OF HISTORICAL STUDIES

Academic Organization

ALBRIGHT

Biographical

ARCHEOLOGY

Academic Activities

SCHOOL OF HUMANISTIC STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

For a memorandum on the above headings, see memo of same date which is filed under the date or the first four headings.

Faculty Minutes 11/18/46

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11/18

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HUMANISTIC STUDIES

CHERNISS, HAROLD

Biographical

Dir?

The name of Cherniss was proposed. Woyl pointed out, "It would not be proper at the moment to consider any other names." Voblen offered general observations on the kind of appointments that could be made. Two categories: those which would aid studies not getting adequate support elsewhere, and those which endeavored to integrate the Institute in the total academic world and to make a great contribution to contemporary currents of thought. "The choice might affect the financial future of the Institute."

Faculty Minutes 11/18/46

1946

11/29

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

DIRAC

Biographical

FEYNMAN

The Executive Committee authorized a joint arrangement with the University by which Richard Feynman would be appointed a permanent member of the Institute and an Associate Professor in the University at \$7,000. Aydelotte will make no approach to this until he is approached by the University authorities.

The Mathematics Faculty decided Dirac would make an excellent permanent professor. Expressed to von Neumann he would be interested in a temporary appointment.

Minutes, School of Mathematics, 11/29/46

1947-1957

MEMBERS

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

STIPENDS

Academic Personnel

See file, D, Physics - Budget, for members in theoretical physics and stipends for the years above.

file

Also see/D, Memorandum - Minutes, indicating that at least from March 21, 1951, the physics professors, then consisting of Oppenheimer, Pais, Placzek, and Yang, met apart from the School of Mathematics and nominated their members.

?
x

x not prof. per se.

See Minutes SM 24/48 - meeting Phy Com -
Swan Rev. v. n.

D Physics

See files named above

GENERAL

Public Relations

✓ SCHOOL OF MATHEMATICS

Academic Organization

"Notice published in Science, Oct. 10, 1947, and in Bulletin of the American Mathematical Society, November 1947

"The School of Mathematics of the Institute for Advanced Study will allocate a small number of stipends to gifted young mathematicians and mathematical physicists to enable them to study and to do research work at Princeton during the academic year 1948-1949. Candidates must have given evidence of ability in research comparable at least with that expected from the degree of Doctor of Philosophy. Blanks for application may be obtained from the School of Mathematics, Institute for Advanced Study, Princeton, N. H., and are returnable by February 1, 1948."

File D Amer. Math. Soc.

1947

4/21

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF ECONOMICS AND POLITICS

WILMERDING, LUCIUS

Biographical

PAIS, ABRAHAM

Stewart recommended a third year membership for Wilmerding at \$3,000 to complete his book, The Power of the Purse. Voted.

Von Neumann recommended Pais a five-year membership annual stipend \$6,000. Voted.

Faculty Minutes, 4/21/47

1947

9/18

BUILDINGS AND GROUNDS

Facilities

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HUMANISTIC STUDIES

AYBELOTTE, F.

Biographical

Aydelotte to Oppenheimer, September 18, 1947.

Meritt has asked that Hertzfeld's office "traditionally, Humanistic space" should be given to Homer Thompson, new member of School of Humanistic Studies. At the same time, Veblen has requested that Hertzfeld's space should be assigned to Siegel and should become part of the quarters dedicated to mathematics. Aydelotte does not wish to decide the question since he is leaving. He advises Oppenheimer to adopt a temporary solution postponing permanent decision until the number of members of the Institute has decreased or until additional buildings are built. It would be physically possible to put both Thompson and Siegel in these Hertzfeld rooms. He has an impression, however, that Siegel is contented with a small room which he has been occupying, and "I have a kind of conservative feeling that the fewer changes we make at this moment, the better."

This is the person w/o necessity
A File, J. Robert Oppenheimer

1947

9/23

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

OPPENHEIMER, R.

Biographical

Oppenheimer reported that he had asked Niels Bohr for the second semester 1947-48 at \$8,000 after conference with Maass and Leidesdorf. He had offered memberships in the Institute without stipend to Drs. Egil A. Hylleraas and Nicolas G. van Kampen, physicists. He recommended membership for Hideki Yukawa and Pauli for 1948-49. Approved.

It was understood that the salaries for the above-named physicists are to be outside of the Stipend Fund, and to be determined by the Director and the Trustees. Oppenheimer recommended a policy on salaries of visiting professors: those who could appropriately be considered for permanent appointments to the Institute as professors should have their salaries decided to be essentially the same as those salaries of the faculty.

Minutes, School of Mathematics, 9/23/47

1747

October

✓ SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY

Relations WOAI

REIDEMEISTER, KURT

Biographical

On the recommendation of Weyl and Siegel and with the cooperation of Lefschetz, Reidemeister was invited as a Visiting Professor of Mathematics, first term, ~~1947-48~~ 1948-49, Princeton University, to give a graduate course on parts of topology and consultation with advanced students and by the Institute for the same sum of money as a member for the year with a stipend of \$3,000.

The material appears in a file in income tax for income tax data for David M. J. Levy of Maass, Davidson, Levy, and Friedman in connection with an appeal from the Internal Revenue Bureau ruling; the data were submitted to Levy about February January, 1952. File does not reveal the outcome.

D, Income Tax, Kurt Reidemeister

10/21
11/3

/ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL

Publications

GENERAL

Academic Personnel

ALEXANDER

Biographical

Alexander asked for permission to change his status to member at half-salary, continuing this arrangement up to normal retirement age. Oppenheimer replied flexibility is desirable, and there was nothing in Alexander's contract that required a formal attendance at meetings or the performance of administrative duties. He stated he would be very reluctant to believe that a professor could not follow his own separate path without the burden of administrative details. Hoped that the School would back him up in doing just what Alexander wishes, if even if he desired to resign his professorship. The mathematicians expressed approval of Oppenheimer's attitude in this matter.

Oppenheimer left doors open for the future, suggesting the possibility of a leave of absence for Alexander. The

question of a new appointment of a professor of mathematics should be separate from Alexander's change of status. Any new appointee should be considerably younger than anyone then on the staff.

2/4/53 ✓
Von Neumann wanted an analyst appointed to the Editorship of the Annals of Mathematics instead of Lefschetz's suggestion of ~~Artin and Steenrod~~ Artin and Steenrod. Von Neumann wanted to persuade Siegel.

At the November 3 meeting, Siegel agreed to serve as Editor, and von Neumann, Morse and Siegel were to talk over the Annals of Mathematics situation with Lefschetz.

Appended to the Minutes of November 3 was a note signed by Alexander, von Neumann, Siegel, Veblen, Weyl and Einstein and Oppenheimer to the effect that the Annals informally organized with the editorial work handled chiefly by Professor Tucker in the past has bogged down. Proposal made that the organization be made parallel with that being arranged for a similar series of publications in Physics under the editorial management of Oppenheimer and Smyth.

This suggestion was approved by Artin at a meeting of the Mathematics Department of Princeton University the prior week. Morse was nominated as the Institute's representative on the Editorial Board.

Siegel manuscript? Probably incomplete w/ edit. resp.

See memo 2/23/49 - Montg. willing resign editorship Am. Jour. Math. + take editorship Annals w/ Siegel essay.

Minutes, School of Mathematics, 10/21/47 and 11/3/47

1948

2/2

PARTICIPATION IN ADMINISTRATION

Academic Personnel

DIRECTOR'S FUND (GENERAL)

Finance

✓ SCHOOL OF MATHEMATICS

Academic Organisation

UHLENBECK

Faculty approved his appointment which Director had earlier presented to Trustees and secured approval faculty (12/16/47).
Paid from stipend fund.

Francis Fergusson first member appointed by Director from his Fund.

Faculty Minutes, 2/2/48, p. 194

1948

2/4

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

OPPENHEIMER, R.

Biographical

EINSTEIN, A.

VON NEUMANN

Oppenheimer suggested that a Committee on Physics of the School of Mathematics be appointed, and the mathematics faculty approved. Einstein and von Neumann were appointed to act with Oppenheimer, and the Committee would act with the same authority as the School of Mathematics.

But they did not, for they approved Pleszke + math. didn't?

Minutes, School of Mathematics, 2/4/48

SCHOOL OF MATHEMATICS

Academic Organization

MONTGOMERY, DEANE

Biographical

Deane Montgomery appointed permanent member at \$8,000 a year with 5 per cent contribution to the TIAA, and a stipulation that this would be the extent of the Institute's commitments. He had been on a five-year appointment which he protested did not give him sufficient security.

Executive Committee Meeting Minutes, February 10, 1948

4/15

✓ SCHOOL OF MATHEMATICS

Academic Organization

VEBLER, O.

Biographical

Veblen added to the report mention of the scientific work going on in physics during the past year. There has been a joint Princeton-Columbia-Institute weekly seminar which have been both extraordinarily popular and stimulating. The Director added that the stipend fund for physics would probably not have to be used for American physicists because of the many fellowships in physics being used next term at the Institute.

Trustees' Minutes, April 15, 1948

1948

4/15

✓ SCHOOL OF MATHEMATICS

Academic Organization

MEMBERS

Academic Personnel

GRANTS-IN-AID

GIFTS

Finance

The Director reported an approximate 60 per cent increase in memberships in the 1948-49 term limited to the School of Mathematics, and appended to the minutes is a list of the sources of outside funds and the purposes for which granted. Changes in the traditional pattern of members coming to work at the Institute were mentioned. Members in physics, for instance, come for a year or so of research and advanced study before going into teaching. Another variation is Professor Earle's program of conducting yearly seminar in which he decides on a subject, travels abroad and in this country to consult and invite participants. The insight developing from these seminars is often of a sort not otherwise obtainable. He pointed to the just completed conferences centering around Professor Toynbee, in which in general terms it was discussed how to talk about a culture, as an example of meetings performing a real service.

Trustees' Minutes, April 15, 1948

1948

8/2

✓ SCHOOL OF MATHEMATICS

Academic Organization

CONTRACTS

Government Relations

NATIONAL RESEARCH COUNCIL

Foundations

MEMBERS

Academic Personnel

N. R. C. Fellowship Office informs Oppenheimer of following post-doctoral fellows in the physical sciences:
Edwin J. Akutowicz, David Feldman, Joseph V. Lepore.

D, National Research Council A. E. C. Fellowships

1946

10/27
11/19

PARTICIPATION IN ADMINISTRATION

Academic Personnel

SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

✓ SCHOOL OF MATHEMATICS

STEWART, W. W.

Biographical

EARLE, E. K.

4
hit - not

Stewart to Oppenheimer. In anticipation of the Faculty meeting with School of Economics and Politics on November 3, Stewart pointed out the need of future faculty appointments to the School, mentioning at the same time Earle's memorandum on the conference in studies of France (See memorandum October 22, Chronological). There were five faculty members: Earle, Mitrany, Riefler, Stewart, and Warren, and the Trustees upon the recommendation of the Faculty and the Director authorized the appointment of two additional faculty members: an economist and an historian, neither of the two turned out to be available, says Stewart. The faculty, now three, will be two

when he retires in 1950. Stewart says it seems appropriate to consider a type of scholar who might be considered for appointment and indicate the method of selection, and suggests a conference to discuss it.

He mentions two topics he thinks it advisable not to discuss at the group meeting--one concerns the economic fund under the terms of the grant made by the Foundation, and the other, correspondence with Professor Hayek.

Katherine Russell to Chernias, von Neumann and Weyl, calling them to a meeting Oppenheimer is having in his office on November 24, with Earle, Stewart, Warren and Viner.

D, Historical Studies, *Recommendations of Faculty*
~~Minutes of Meetings~~

1948

11/9

SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

SCHOOL OF MATHEMATICS

PRINCETON UNIVERSITY

Relations WOAT

SELBERG, ATLE

NEUGEBAUER, OTTO

FRANKL, DR. PAUL

ELIOT, THOMAS

BOHR, NIELS

Faculty meeting of November 9, 1948.

Filed in Chronological File, 11/9/48.

Minutes Faculty Meeting, November 9, 1948, File V-1

1948

12/7

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

STIPENDS

Academic Personnel

ELIOT

DYSON

The Director reported Eliot may come back in 1950. He requested authorization from the Faculty to budget \$9,000 to be used during the next five years to provide stipends for three terms for Dyson, now Commonwealth Fellow. Granted.

Director reported he had offered Professor Chern of Nanking an appointment for three years, an emergency offer.

The Faculty confirmed it. (Interesting to note that this was the origin of the reports to the Faculty on expenditures from the Director's Fund).

The Minutes contain the names of those present at the bottom rather than the top, a radical change. They are also

not designated as Minutes. They are not signed. The Director solicited suggestions from the Faculty.

Faculty Minutes, 12/7/48

1949

2/23

✓ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL (ANNALS)

Publications

Princeton U.

Rel. 400 A1

~~And~~ The difficulties of the Annals of Mathematics was discussed by von Neumann and others. Professor Montgomery said he was willing to resign his editorship of the A. M. S. Bulletin to become editor of the Annals of Mathematics, and Siegel is willing to assist. It was generally approved that Montgomery should have a scientific assistant, a part of whose time would be spent on editorial problems of the Annals. Hope was expressed that the contribution of the Institute's staff to editorial problems may be such that 50 per cent of the papers submitted to the Annals may be automatically referred to the staff of the Institute.

See memo's (D-2) 1/3 147

Minutes, School of Mathematics, 2/23/49

1949

5/25
9/14

X9/26

CONTRACTS (A. E. C.)

SCHOOL OF MATHEMATICS

OPPENHEIMER, R:

Government Relations

Academic Organization

Biographical

For letters of May 25, 1949 from Oppenheimer to Beckerley, and September 14, 1949 from Oppenheimer to Kelley, regarding the contract No. AT-30-1-GEN-349, see Chronological File where they are attached to a memorandum filed under 1949, 9/20.

D File, Atomic Energy Commission (IAS)
Contract No. AT-30-1-Gen-349 & AT-30-1-1240

1949

9/20
9/22
9/26
3/14
3/17

CONTRACTS (A. E. C.)

Government Relations

✓SCHOOL OF MATHEMATICS

Academic Organization

OPPENHEIMER, R.

Biographical

Kelley, Manager, A. E. C., to Oppenheimer, September 20, 1949.

He says that the question discussed in Oppenheimer's of September 14, 1949, was submitted for decision which will be taken, presumably by the Commission, on September 21.

Chadwell, Acting Manager, A. E. C. to Oppenheimer, September 22.

The decision has been taken. No fellowship should hereafter BE AWARDED and no fellowship renewed under the subject contract unless the prospective fellow has received appropriate clearance from the Commission.

Oppenheimer to Chadwell, September 26, 1949.

"I have discussed the problems raised by your letter with our Faculty. It is our unanimous opinion that the provisions of the Appropriation Act make it impossible for us to make any further grants. In view of the non-secret nature of our work and of the traditions of the Institute for Advanced Study, we should be unwilling to make any appointments to membership in the Institute conditional upon an investigation by the Federal Bureau of Investigation. We shall therefore make no further grants-in-aid the funds for which would be derived from the subject contract.

"We have already made four appointments to memberships with grants totalling \$15,500. These were made last spring. It is our understanding that in the case of these grants the provision of the new Appropriation Act are not applicable. Should we be wrong in this interpretation, we should not wish to pay these members from monies derived from the Atomic Energy Commission. We should appreciate your advice on this matter..."

On March 14, 1950, Kelley, Manager of the New York Operations, A. E. C., sent a peremptory wire prohibiting discussion of thermo-nuclear weapons with unauthorized persons regardless of classification of the information. "This means that until further notice no information on this subject can be made public by people working for the A. E. C. or for contractors on A. E. C. contracts. All...employees...are instructed to refrain from publicly stating facts or giving comment on any thermonuclear reactions of the Commission's program..."

This was followed by a very different kind of wire on March 17, directed to Miss Trinterud (who handled a good deal of the correspondence with respect to the A. E. C. contract). Kelley regrets the abruptness and tone of the previous message which were not sufficiently explanatory. The assistance and cooperation of all employees and contractors and consultants is requested to avoid the release of technical information. The instructions will still permit unclassified discussions of what might be called the classical thermonuclear reactions as long as there is no reference to their relation to weapons."

Atomic Energy Commission (IAS)
D Contract No. AT-30-1-Gen-349 & AT-30-1-1240

/SCHOOL OF MATHEMATICS

Academic Organization

LIBRARY

Facilities

MEMBERS (LONG-TERM)

Academic Personnel

THEORETICAL PHYSICS

Academic Activities

Oppenheimer reported on the problem of enlarged library, saying that he thought all the rooms on the second floor should be used on an increasing basis, anticipating that the whole of the floor will eventually be used for the library. He suggested the possibility of placing a balcony around the main library room so that shelves out of reach could be used. The Library Committee has suggested a new library building, but Oppenheimer's plan seems to be elastic and inexpensive.

Oppenheimer reported on long-term appointments in physics, and Yang and Placzek were ~~appointed~~ recommended for appointment for five years each with stipends at \$5,500 and \$9,000 respectively.

Richard Feynman and Julian Schwinger were approved for appointment as professors. Morse said the question of appointing

By-consent
Gödel a full professor, and there was no dissent, but no action taken.

Recommended that Neugebauer be given a five-year appointment with stipend at \$5,000 a semester for one semester each year. Recommendation to be presented to the faculty.

School of Mathematics
Minutes, /February 8, 1950

1950

2/13

PARTICIPATION IN ADMINISTRATION

Academic Personnel

MEMBERS

✓ SCHOOL OF MATHEMATICS (COMMITTEE ON
PHYSICS)

Academic Organization

The Director reported two five-year appointments in physics for Faculty approval: Placzek with a grant-in-aid of \$9,000 a year, and Yang with a grant-in-aid of ~~\$\$\$~~ \$5500 a year. The Director reported the physics group needed the stability of some longer-term members, and that he hoped to secure the right person for a full professorship. Approved.

Faculty Minutes, 2/13/50

1950

2/13

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HISTORICAL STUDIES

NEUGEBAUER, OTTO E.

Biographical

Director suggested that since Neugebauer's work falls within the two Schools, Director stated he would include a \$5000 special budget item for one semester for the next five years to cover a grant-in-aid to Neugebauer for this period. A member working with Neugebauer would be supported by the School to which he would naturally belong. This appointment and suggested arrangement was approved.

Which sch?

Faculty Minutes, 2/13/50

1950

2/13

PARTICIPATION IN ADMINISTRATION

Academic Personnel

MEMBERS

✓ SCHOOL OF MATHEMATICS

Academic Organization

GÖDEL, KURT

Biographical

The School of Mathematics had considered a professorship for Gödel, but had not made a decision.

Faculty Minutes, 2/13/50

3/27

✓ SCHOOL OF MATHEMATICS

Academic Organization

GÖDEL, KURT

Biographical

EARLE, E. M.

Earle, to Oppenheimer, March 27, 1950.

An agonized letter from France in which Earle puts himself on record as opposing the appointment as Professor of Gödel at this time, and asks for a deferral of the appointment until October of 1950 so that he may participate in the Faculty meeting. Admitting that he does not know the most about Gödel's qualifications, he thinks that there is little reason for changing his status at the present moment. He is impressed by Siegel's reservations on Gödel, Gödel's scientific qualifications. Furthermore, he holds that the School of Economics and Politics with positions vacated by Mitrany, Riefner and Warren and the coming retirement of Stewart at the end of 1950 requires a long term of permanent memberships. He also urges that no Faculty appointment be made without two Faculty meetings on it, no Faculty nomination be made without two Faculty meetings on it.

He points out that no appointment has been made since Flexner left without unanimous approval by the Faculty, and regrets he has to say it wouldn't unanimous if Gödel were appointed.

He also adverts to his defeat on the nomination of Gilbert, and swears that it has had no effect upon his attitude toward Gödel.

D, Earle, Edward M. - 1945

1950

3/27
4/3

SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HISTORICAL STUDIES

GÖDEL, KURT

Biographical

EARLE, E. M.

OPPENHEIMER, R.

Earle opposed the proposed appointment of Kurt Gödel to the School of Mathematics in March, 1950, by blackballing. He pointed out that there had been no appointments in the School of Historical Studies to replace those vacated by Mitrany, Riefler, Warren and Stewart's coming retirement, and, as a matter of fact, the School of Mathematics has been appointing several during the past two years. He thinks there would be no money left for the School of Historical Studies. He makes his point in 4 letters to Oppenheimer dated March 27, 1950, one formal, one informal.

Oppenheimer to Earle, April 3, 1950. It is not going to be difficult to defer the action on Gödel's appointments since the School, itself, is divided about the wisdom of it.
D File, Earle, Edward M., 1945

1950

SCHOOL OF MATHEMATICS

Academic Organization

BENEFITS

Academic Personnel

PROFESSORS (EMERITI)

VEBLEN, O.

Biographical

EINSTEIN, A.

Last meeting School of Mathematics faculty attended by
a professor emeritus.

School of Mathematics Faculty Minutes

1950

5/4

SCHOOL OF MATHEMATICS

Academic Organization

BROWDER, FELIX

Biographical

Witold Hurewicz, Professor of Mathematics at Massachusetts Institute of Technology to Oswald Veblen, recommending highly Felix Browder as an outstanding researcher and analyst in mathematics post-doctoral. Browder had secured his ~~doctorate~~ Ph. D. in Princeton ^{in 1948} after graduating from M. I. T. in 1946. (That was Ph. D. in 1948). Browder is 23, has excellent potentialities of future scientific development. He is broadly cultured and widely read. He has a pleasant, quiet personality and one of the best conversationalists I have met. It is a sad fact that he cannot secure a post because of his father's political activities.

W (Weyl) File Bran-

1950

9/26

✓ SCHOOL OF MATHEMATICS

Academic Organization

POLICIES

Administration

BROWDER

Biographical

Mathematics Faculty decided "his case not strong enough to make it in the interests of the Institute to grant him a membership."

School of Mathematics Minutes, (D Office)

1950

11/14

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN

Biographical

VEBLEN

XXXX PAIS

MONTGOMERY, DEANE

SELBERG, ATLEY

LERAY, JEAN

? The Director reported with the retirement of Veblen and Einstein, there would be four vacancies in the School of Mathematics' Faculty, 1951-1952. The School recommended the appointment as Professor of Montgomery, Pais and Selberg, effective July 1, 1951. School recommended a replacement of a senior member to the mathematical faculty appointment of Professor Jean Leray of the Collège de France, but

preliminary discussions had brought out that Leray would not now consider a permanent appointment. Therefore a three-year appointment was recommended, for Leray, subject to Trustee approval of the grant-in-aid since this would be on the professorial level and a special budgetary item.

Faculty Minutes, 11/14/50

1950

11/14

PARTICIPATION IN ADMINISTRATION

Academic Personnel

MEMBERS

✓ SCHOOL OF MATHEMATICS

Academic Organization

APPLIED MATHEMATICS

Academic Activities

BIGELOW, J. H.

Biographical

GOLDSTEIN, H. H.

The Director asked the Faculty to vote on permanent memberships for Bigelow and Goldstein of the E. C. P. The project, though an exception in the Institute, could not be run with transient members; annual cost to be \$8500 each, at present covered by Government contracts. "Should the Project be discontinued, however, the Institute would have definite commitments in both appointments. Von Neumann briefly reviewed the careers and present work of both nominees. In general discussion both men were highly recommended by members of the Faculty. Approved by unanimous vote.
Faculty Minutes, 11/14/50

1950

11/14
11/20

PARTICIPATION IN ADMINISTRATION

Academic Personnel

SCHOOL OF HISTORICAL STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

Biographical

PAIS

SELBERG

MONTGOMERY

WOODWARD

KANTOROWICZ

First Pais, Selberg and Montgomery invited to meeting though their nominations as professors were presented at it. Approved at meeting. But nomination of Woodward and Kantorowicz presented by School of Historical Studies deferred to next meeting. (3 S. M. men were permanent members and known to I. A. S. reason) But the difference in treatment was noted and it was decided that hereafter nominations would be acted upon not when first proposed but at next meeting. The meeting of the 14th had approved appointment of Bigelow and Goldstein as permanent members. Action repeated November 20, 1950.
Faculty Minutes, p. 216

1950

11/20

PARTICIPATION IN ADMINISTRATION

Academic Personnel

SCHOOL OF MATHEMATICS

Academic Organization

DIRECTOR

Administration

POLICIES

The Faculty decided that in the future the election of permanent members would follow the same procedure as that of Faculty members; that is, proposal at one meeting, formal action subsequently. Therefore, they went through the procedure of voting these appointments, the appointments of Bigelow and Goldstein voted previously, November 14, 1950, without notice at the November 20 meeting.

Faculty Minutes, 11/20/50

1950

12/29

✓ SCHOOL OF MATHEMATICS

Academic Organization

LERAY, JEAN

Biographic al

The Collège de France expressed a preference for ~~xx~~
Leray to come as Visiting Professor for the first semester of
each of the next five years at \$7,500 per semester. Approved.

Exec. Comm. Minutes, 12/29/50

1951

5/4

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

OPPENHEIMER, R.

Biographical

WHITNEY

The School of Mathematics had held one ~~working~~ meeting to consider appointing Whitney to a professorship at the Institute. Whitney, a creative and exciting figure, and the School wished to make the offer even if Whitney does not come. Second meeting to approve the offer had not been held as yet, and, therefore, Oppenheimer asked the Board's permission to make the appointment subject to the vote of the Faculty; salary \$18,000. The Board granted the conditional approval.

Trustees' Minutes, 5/4/51

1951

11/13

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

BEURLING

Biographical

CHARNEY

The Director announced the Trustees authorized the approval of Professor A. K. A. Beurling as a member of the School of Mathematics for the academic year 1952-53 (no previous record of Faculty consideration).

The Faculty authorized for appointment to membership of Dr. Jules Charney for five years at \$9,000 a year, \$K "from funds available."

Faculty Minutes, 11/13/51

1951

12/17

PARTICIPATION IN ADMINISTRATION

✓ SCHOOL OF MATHEMATICS

ERNEST BEURLING, ARNE K. A.

VAN HOVE, LEON C. P.

YANG

PLACZEK

Academic Personnel

Academic Organization

Biographical

Subject to Trustee concurrence, it was agreed to extend one year membership for Beurling to a five-year appointment effective 1952 at \$12,000 a year.

Voted to offer Van Hove a three-year membership at \$5,500.

The Director commented on Yang and Placzek, and announced he would raise the question of placing their associations on a more permanent basis.

Faculty Minutes, 12/17/51

1952

2/18

✓ PARTICIPATION IN ADMINISTRATION

Academic Personnel

SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HISTORICAL STUDIES

YANG

PLACZEK

GUERLAG

•
KOYRÉ

Permanent membership with Provision for retirement
approved for Yang and Placzek.

Discussion of inviting to membership Guerlag and Koyré.

Faculty Minutes, 2/18/52

April

✓ SCHOOL OF MATHEMATICS

Academic Organization

NATIONAL SCIENCE FOUNDATION

Foundations

members

Academic Personnel

See file for booklets giving information on fellowships;
also for list during various years of fellows to the Institute
(from the National Science Foundation, both pre-doctoral and
post-doctoral.

D, National Science Foundation

1952

4/2

PARTICIPATION IN ADMINISTRATION

Academic Personnel

MEMBERS

✓ SCHOOL OF MATHEMATICS

Academic Organization

PLAZCEK, GEORGE

Biographical

YANG, CHEN NING

The School of Mathematics recommended to strengthen the permanent staff in theoretical physics, that Placzek and Yang, now holding five-year memberships be made Permanent Members in the School of Mathematics at \$10,000 a year, and with their concurrence, a joint 5 per cent contribution - 5 per cent contribution to TIAA; that in the case of Yang, there be no commitment as to whether he will or will not at a later date be offered a Professorship; the issue to be determined by the progress in his own work and by the general situation of physics at the Institute, and by the relative merits of competing candidates for such a Professorship. But there is a substantial probability that, in the light of these

conditions, he will in fact be offered a Faculty appointment at a later date. But in the case of Placzek, it is not at this time anticipated that he will be offered a Professorship at the Institute, and that he should be so notified.

The recommendation as applied to Yang was approved. As applied to Placzek it was amended to state:

"That, in the case of Placzek, it is not at this time anticipated that he will be offered a Professorship at the Institute; that this will not occur unless circumstances now unanticipated supervene." It was approved, Montgomery abstaining. (Presumably because of the liberalization of the recommendation of the School and its softening).

Faculty Minutes 4/2/52

1952

4/2

PARTICIPATION IN ADMINISTRATION

Academic Personnel

MEMBERS

✓ SCHOOL OF MATHEMATICS

Academic Organization

BEURLING

Biographical

Beurling's appointment to be changed to five years,
but no longer. For any period he could obtain leave from
Uppsala.

Faculty Minutes, 4/2/52

1952

6/5
6/23

GENERAL (Amer. Mathematical Society)

Foundations

✓ SCHOOL OF MATHEMATICS

Academic Organization

MacNelle, Exec. Dir. Amer. Math. Soc., to Prof. Morse:

"For the three year period 1950-1952, inclusive, the dues of the Institute for Advanced Study were \$1,275 per year. Based on the new publication average, the dues of the Institute for the years 1953-1955, inclusive, will be \$2,050 per year. As the rate per page remains the same, this increase reflects a substantial increase in the research publication credited to the Institute."

Prof. Morse to Dr. H. M. MacNelle:

"...Dr. Oppenheimer stated at once that this was a proper and necessary bill for the Institute to pay, although it is of course a large one."

File D Amer. Math. Soc.

SCHOOL OF MATHEMATICS

Academic Organization

OPPENHEIMER, ROBERT

Biographical

VON NEUMANN, JOHN

Memo from J. von Neumann to Dr. Oppenheimer:

"I discussed the American Mathematical Society proposal to the National Science Foundation with Professor Begle, the Secretary of AMS. The sentences referring to the Institute have now been changed as follows:

"The founding of the Institute for Advanced Study has had a profound influence on research in Mathematics in this country. The existence of a place where mathematicians can gather to do research without the burden of teaching has been markedly beneficial. Nevertheless, it has not been the primary purpose of the Institute to organize meetings of a group of experts all interested in a single subject, and it has in fact not done so in mathematics."

File D Amer. Math. Soc.

1952

11/17

11/18

SCHOOL OF MATHEMATICS

Academic Organization

PRINCETON UNIVERSITY (PALMER LABORATORY) Relations WOAI

OPPENHEIMER, R.

Oppenheimer, to Pais, von Neumann, and Yang, November 17, 1952.

He announces that Princeton University has embarked on a study project for a strong focussing high energy accelerator. The Physics Department and Milton White, who is in charge of the study, have asked the Institute to participate in the planning and discussion of the undertaking; and Oppenheimer has suggested that the three above-named and himself might serve from time to time in that capacity. He says they will meet regularly weekly at 11:30 a. m. on Wednesdays for these planning discussions.

On November 18, Milton White to Oppenheimer, expressing pleasure, "that you have offered to throw the Institute power into the multi-billion volt accelerator design study which Princeton is now organizing." He says it is to the interests of the Atomic Energy Commission, Princeton University, and the Institute that

the outstanding group of scientists at the Institute should become closely associated with a scientific venture that will surely carry us well beyond the bounds of present knowledge.

D File, Accelerator Panel- IAS/Princeton University Study Project

1953

2/13
4/2

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

METEOROLOGY

Academic Activities

At the first meeting noted above, von Neumann indicated his long-term interest in meteorology.

At the second meeting noted above, the Director announced that it would be further discussed, and must come up to the Board of Trustees. It may involve securing extra outside funds if the program is continued in full vigor.

Faculty Minutes, 2/13/53 and 4/2/53

1953

10/14

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

MEMBERSHIP

Academic Personnel

JOST, RES

Biographical

As director asked faculty to approve a five-year appointment, question asked why not permanent membership offered. Some explanation satisfied and they appointed five-year term.

Faculty Minutes, p. 255

1953

10/14

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

JOST, RES

Biographical

BEURLING

Five-year appointment was approved for Res Jost.

Beurling was recommended for a professorship by the School of Mathematics, but no action was taken in a general concern that the appointment might block the possibility of an appointment in the School of Historical Studies for some years. The Director made it clear that unless the endowment of the Institute was increased, any professorial appointment now would preclude further appointments in the near future. No action taken. The Faculty was promised to weigh the consequences.

Faculty Minutes, 10/14/53

1952 1953

10/26

PARTICIPATION IN ADMINISTRATION

Academic Personnel

GENERAL

Finance

SCHOOL OF HISTORICAL STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

BEURLING

Biographical

This was a meeting at which the nomination of Beurling by the School of Mathematics was to be discussed. The Director said he had talked to the Trustees about the fact that expenditures matched income, and had gained only the impression that "when the question became urgent, steps would be ~~not~~ taken." He said, the Director said, there were two extreme courses that the Faculty could take: either to go ahead with the appointments that seemed desirable without concern for the financial side of the picture, or to refrain from further appointments because of such concern. He recommended some intermediate course of action be taken. (He undoubtedly was talking only of Faculty action here).

General discussion ensued, and the Bourling appointment was discussed particularly. Earle and Panofsky expressed great concern that this appointment might block further appointments in the School of Historical Studies which might come up in the next couple of years. Furthermore, the Bourling appointment would exacerbate the disbalance between the two Schools in favor of mathematics. Panofsky and Earle expressed the fear that the Institute would become an Institute of Mathematics instead and that the School of Historical Studies would gradually die out. The Director consented on this, and in the language of the Minutes: "stressed the unique position that the School of Mathematics occupies in the mathematical community." Morse and von Neumann expressed their high regard for the School of Historical Studies and their wish that it would be further strengthened. Morse point out that the increase in expenditures involved in the Bourling appointment would not be great, and he would favor a cut in the stipend budget in mathematics, rather than see the opportunity missed.

Heritt was assured by these assurances that the School of Mathematics would view sympathetically future appointments

proposed by the School of Historical Studies.

No action was taken on the Beurling appointment, because the Director was going to be away for a month.

Faculty Minutes, 10/28/53

1953

12/14

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HISTORICAL STUDIES

BEURLING

Biographical

The Director stated the School of Historical Studies was now in the process of selecting from among many promising prospects, a candidate or candidates for permanent appointment and the matter would probably be ready at the next Faculty meeting. Whitney expressed the hope that the proposed appointment of Beurling would not preclude new appointments in the School of Historical Studies. The motion was unanimously adopted by the Faculty. (The motion was to recommend the appointment of Beurling to a professorship).

Faculty Minutes 12/14/53

1954

12/17

PARTICIPATION IN ADMINISTRATION

Academic Personnel

MEMBERS

✓ SCHOOL OF mathematics

Academic Organization

LERAY, JEAN

Biographical

Jean Leray's five-year membership was extended by five years to 1965!

Faculty Minutes, 12/17/54

1954

12/17

PARTICIPATION IN ADMINISTRATION

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

THEORETICAL PHYSICS

Academic Activities

PLACZEK

Biographical

Placzek supported by Director and the Institute physicists backed by Bethe, Bohr and Rabi, was opposed by mathematicians as professor. Von Neumann and wrote in opposition.

General question raised: separate school for Theoretical Physics? Nature of appointments, etc. On January 14, 1955, faculty voted professorship down for Placzek 8-6. Cherniss moved, Panofsky seconded.

Faculty Minutes, pp. 266 and 268

1954

12/17

PARTICIPATION IN ADMINISTRATION

MEMBERS

✓ SCHOOL OF MATHEMATICS

YANG
CHARNEY
PLACZEK

Academic Personnel

Academic Organization

Biographical

unanimously

The School of Mathematics agreed/not to recommend a professorial appointment for Professor Charney.

It unanimously agreed to recommend a professorial appointment for Yang.

It disagreed upon professorship for Professor Placzek.

Some of the members of the School were unalterably opposed to Placzek and the nomination could not be considered with~~out~~ their concurrence. Those working in theoretical physics are firmly convinced the recommendation should be made.

There was a discussion on above.

Professors Bethe, Bohr, and Rabi had written in 1952 in support of a permanent appointment for Placzek. These letters were read. Von Neumann opposed the professorial appointment.

"The discussion, transcending the merits of the individual case, touched upon the ontological difference between 'permanent' and 'professorial' appointments; on the desirability of dividing the School of Mathematics into a section devoted to pure mathematics and another section devoted to theoretical physics; and on the troublesome nature of permanent non-professorial appointments."

Faculty Minutes, 12/17/54

1955

1/14

PARTICIPATION IN ADMINISTRATION

Academic Personnel

SCHOOL OF HISTORICAL STUDIES

Academic Personnel Organization

MEMBERS

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

Alföldi voted.

Woodward reported the choice of successor to Harle had narrowed down to Professor Samuel E. Thorne and David Harris Willson, with the School favoring Willson.

School of Mathematics got the Faculty to approve an extension of a three-year appointment for Professor Kunihiko.

~~*****~~ Yang was approved for a Professorship.

The Director brought up Professorship for Flacsek. Moved by Chernick, seconded by Fanofsky that Flacsek be recommended to the Board of Trustees for Professorship. Defeated by majority of Faculty Minutes, 1/14/55

1233
First Term

MATHEMATICS

Academic Activities

✓ SCHOOL OF MATHEMATICS

Academic Organization

of the 81 short-term members listed in the School of Mathematics for the first term
53 ~~members~~ are mathematicians. The three assistants listed in this School are also
mathematicians.

Interview with Professor Veblen, 11/18/55

1955

6/30

✓ SCHOOL OF MATHEMATICS

Academic Organization

ELECTRONIC COMPUTER PROJECT

Academic Activities

Balance Sheet shows I. A. S. had spent \$65,271 on E. C. P. and others had and would contribute \$1,423,068.22, making total on liability side \$1,488,339.

On asset side, Cost of 2 computers built:

(Proj. #1 & #2)

\$ 797,641

Cost of buildings

184,471

982,112

Proj. #3 continuing research

506,227

Total

1,488,339

Project #3 Institute has contracted for further research and development work on electronic computing devices.

~~XXXXXXXXXXXX~~ Treasurer's Report, Exhibit A

1955

8/23
8/25

SCHOOL OF MATHEMATICS

Academic Organisation

MEMBERS

Publication

MORSE, MARSTON

Biographical

OPPENHEIMER, R.

Morse to Oppenheimer, August 23, 1955.

He encloses a copy of a letter from himself to Oppenheimer dated April 5, 1955, in which it was arranged that pages additional to the three allowed a mathematician in the PROCEEDINGS OF THE NATIONAL ACADEMY could be paid for in the following manner: if the man was on contract the cost of the page was to be assessed against the contract. If he was a member of the Institute it was charged to the Publication Fund.

On August 23, Morse raises the point such could be done about the same contingency for members whose grants come from outside the Institute, and not from a contract. What should be done about assistance paid from the assistance fund of the Institute? He recommended that the former case members seek aid outside from the source of his

funds, and in the latter the Publication Fund of the Institute should pay.

Oppenheimer to Morse, August 25, 1955.

He agrees basically and says that all the expenses to the Publication funds are to be budgeted to them and not to the stipend or assistantship funds. "With regard to members who are not paid by the Institute, and who are not on a contract, we may not be able to adopt a uniform policy. Fellowships, like the Jewett Fellowship, of the ~~past~~ past, which provide some payment to the Institute for the fellows' expenses, clearly oblige us to meet publication costs from these funds. I do not know what the view of the National Science Foundation or the National Research Council would be about grants for publications to fellows. I do not believe that they are likely to make such grants. I would, therefore, propose a uniform general policy that, for all members and assistants where we agree with the wisdom of publication in the PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, we pay the cost of an extra page from publication funds; and in the case of members who are here on contract, and where the contract so permits, we charge this cost of publication to the contract." He suggests the matter be taken up for approval with the other members of the school.

D File, Morse, Marston

1955

11/7
11/8

SALARIES

Academic Personnel

GENERAL

Academic Organisation

PRINCETON UNIVERSITY

Relations NOAAI

SCHOOL OF MATHEMATICS

Academic Organisation

FLEMMING, A.

Biographical

BIRTCHOFF, GEORGE B.

BANBERGER, LEWIS

EINSTEIN, A.

WEYL, HERMANN

Interviews with Prof. Oswald Veblen, 11/7/55, and 11/8/55.

Filed in Vertical File under Interviews.

Interviews with Prof. Veblen 11/7/55, and 11/8/55

1955

11/14
11/28

GENERAL (Amer. Math. Soc.)

Foundations

✓ SCHOOL OF MATHEMATICS

Academic Organization

Curtiss, J. H., Exec. Dir., Amer. Math. Soc. to Prof. Morse:

"...For the next three-year period, 1956-1958, inclusive, the minimum annual dues of the Institute will be \$1,875..."

Prof. Morse to Dr. Curtiss:

"There is agreement among the mathematicians that it would be appropriate for the Institute to continue the payment of dues of \$2,050 even though our dues, strictly computed, are somewhat less than that."

File D Amer. Math. Soc.

1955

11/21

✓ SCHOOL OF MATHEMATICS

PRINCETON UNIVERSITY

PARTICIPATION IN ADMINISTRATION

FLEXNER, A.

VON NEUMANN, J.

VEBLEN, O.

ALEXANDER, J.

RIEFLER, W.

LEFSCHETZ

Academic Organization

Relations W.O.A.I.

Academic Personnel

Biographical

Interview with O. Veblen, 11/21/55

See Vertical File - INTERVIEWS

1955

SCHOOL OF ECONOMICS AND POLITICS

✓ SCHOOL OF MATHEMATICS

RIEFLER, W.

VEBLER, O.

PLEXNER, A.

PANOPSKY, E.

11/26

Academic Organization

Biographical

Interview with Winfield W. Riefiler, November 26, 1955.

~~Filed under 11/26/55~~

Filed in Vertical File, Interviews

1955

12/1

✓ SCHOOL OF MATHEMATICS (7)	Academic Organization
APPOINTMENTS (1, 5)	Academic Personnel
PARTICIPATION IN ADMINISTRATION (2, 3, 5, 9)	
GENERAL (6, 7)	Administration
DIRECTOR (3, 6, 7)	
FRANKFURTER (1, 8)	Biographical
RIEFLER, (1, 3, 8)	
STEWART (3)	
EINSTEIN (5, 6)	
PLEXNER (5, 6, 7, 8, 9)	
VEBLEN (INTERVIEW)	

Interview with Professor Veblen, 12/1/55.

Filed in Vertical File under Veblen Interviews.

12/9

SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

✓SCHOOL OF MATHEMATICS

EARLE, E. M.

Biographical

FLEXNER, A.

VEBLEN, O.

Interview with Mrs. Beatrice Earle, December 9, 1955.

Filed in Vertical File under Interviews.

Interview with Mrs. Beatrice Earle, 12/9/55.

1955

12/10

SCHOOL OF MATHEMATICS

Academic Organization

MATHEMATICS

Academic Activities

THEORETICAL PHYSICS

FLEXNER, A.

Biographical

Social discussion with Professor Morse, 12/10/55.

Filed under "M" in Vertical File under Interviews.

Social discussion with Professor Morse, 12/10/55

1955
SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

✓SCHOOL OF MATHEMATICS

MORSE, M.

Biographical

JEWETT

VEBIEN, O.

EISENHART,

FLEXNER, A.

ELIOT, T. S.

Interview with Professor Morse, December 13, 1955.

Filed in Vertical File under Interviews.

Interview with Professor Morse, December 13, 1955.

1956

PROFESSORS

Academic Personnel

SCHOOL OF HISTORICAL STUDIES

Academic Organisation

✓ SCHOOL OF MATHEMATICS

Future of I. A. S. and both schools.

Morse Interview, 6/21/56, p. 14-15

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HUMANISTIC STUDIES

SCHOOL OF ECONOMICS AND POLITICS

POLICIES

Administration

FLEXNER, A.

Biographical

EARLE, E. M.

HERZFELD, ERNST E.

KANTOROWICZ, ERNST

WOODWARD, E. L.

ALFÖLDI, ANDREW

SIEGEL, CARL LUDWIG

PAULI, WOLFGANG

PANOFSKY, ERWIN

Interview with Professor Veblen, January 10, 1956.

Filed in Vertical File under Interviews.

Interview with Professor Veblen, January 10, 1956.

1956

1/19

✓ SCHOOL OF MATHEMATICS

Academic Organization

APPOINTMENTS

Academic Personnel

WOODWARD, E. L.

Biographical

Woodward to Oppenheimer commenting on the nomination of Borel and Serre. He is worried about appointing such young men. He would not feel it prudent to appoint an historian who would be eligible to hold his professorship for 35 years. "Thirty-five years in one place seems to me too long, and I can't think of anything--short of an exceptional situation such as that accepted by von Neumann--which would attract anyone away from the Institute. This being so, if I am able to visit the Institute in my 100th year, I shall expect to find there a pretty ~~formidible~~ Old Guard."
formidible

D, E. L. Woodward

1956

2/8

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF ECONOMICS AND POLITICS

BUDGET

Finance

VEBLEN, O.

Biographical

EINSTEIN, A.

EISENHART

FLEXNER, A.

PANOFSKY

HERZFELD

Interview with Professor Oswald Veblen, February 8, 1956.

Filed in Vertical File under Veblen Interviews.

Interview with Professor Oswald Veblen, 2/8/56

1956

2/28

PRINCETON UNIVERSITY

✓ SCHOOL OF MATHEMATICS

VEBLER, O.

FRANKFURTER, F.

PLEXNER, A.

PLEXNER, SIMON

WEED

CARREL

RelationsWOAI

Academic Organization

Biographical

Interview with Professor Veblen, February 28, 1956.

Filed in Vertical File under Veblen interviews.

Interview with Veblen, 2/28/56

1956

3/8

SCHOOL OF ECONOMICS AND POLITICS

Academic Organization

✓ SCHOOL OF MATHEMATICS

FOUNDERS

Corperation

BUDGET

Finance

GIFTS

FLEXNER, ABRAHAM

Biographical

Interview with Dr. Abraham Flexner, March 8, 1956,
11:10 a.m. to 12:30 p.m., and 2:30 p.m. to 3:00 p.m.

Filed in Vertical File under Flexner Interviews.

Interview with Dr. Abraham Flexner, 3/8/56

1956

3/26

SCHOOL OF MATHEMATICS

Academic Organization

MORSE, MARSTON

Biographical

BIRKHOFF, GEORGE D.

Casual Interview with Marston Morse, March 26, 1956.

Filed in Vertical File under Morse Interviews.

Casual Interview with Morse, 3/26/56

1956

4/6

✓ SCHOOL OF MATHEMATICS	Academic Organization
SCHOOL OF ECONOMICS AND POLITICS	
POLICIES	Administration
WOODWARD, SIR LLEWELLYN	Biographical
EINSTEIN, A.	
FLEXNER, A.	
MITRANY	

Interview with Sir Llewellyn Woodward, April 6, 1956.
Filed in Vertical File under Woodward Interviews.

Interview with Woodward, 4/6/56

1956

4/8

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF ECONOMICS AND POLITICS

STIPENDS

Academic Personnel

GOTTMAN, JEAN

Biographical

PANOFSKY, ERWIN

EARLE, E. M.

Dinner table conversation with Jean Gottman, April 8, 1956.

Filed in Vertical File under Gottman Interviews.

Conversation with Gottman, 4/8/56

1956

4/15

✓ SCH. OF MATHEMATICS

Academic Organization

EISENHART, MARIE C.

Biographical

FLANNERY, A.

AMBLOTT, F.

VEBLEN, O.

Interview ~~FILED~~ by telephone with Marie C. Eisenhart
in New York, April 15, 1956.

Filed in Vertical File under Eisenhart Interviews.

Telephone Interview with Miss Eisenhart, 4/15/56

5/31 5/31

PARTICIPATION IN ADMINISTRATION
COMMITTEES (NOMINATING
ECONOMICS
NATIONAL BUREAU OF ECONOMIC RESEARCH
SCHOOL OF ECONOMICS AND POLITICS
✓ SCHOOL OF MATHEMATICS
VINER
STEWART
BAMBERGER
RIEPLER
FRANKFURTER
FLEXNER
AYDELOTTE
OPPENHEIMER
MAASS

Academic Personnel
Academic Activities
Foundations
Academic Organization
Biographical

Interview with Walter W. Stewart, May 31, 1956.

Filed in Stewart Interviews in the Vertical File.

Interview with Stewart, 5/31/56

1956

6/4

SCHOOL OF MATHEMATICS

Academic Organization

An article from The New York Times, Monday, June 4, 1956, on a survey sponsored by the Carnegie Corporation made by Educational Testing Service on the teaching of mathematics in elementary and secondary levels of school.

Article filed in Vertical file under "M" for School of Mathematics.

The New York Times, Monday, June 4, 1956.

1926

6/21

PRINCETON (8, 9, 10)

HARVARD (1)

MATHEMATICS (2, 7, 14)

E. G. P. (5, 6)

APPOINTMENTS (2, 3, 4, 5)

SALARIES (3)

FACULTY (10, 11)

SCHOOL OF MATHEMATICS (5, 9, 14, 15)

SCHOOL OF HISTORICAL STUDIES (14)

JOHN HOPKINS (7, 8)

DIRECTOR (10, 11)

TRUSTEES (11)

RESEARCH (13)

HORSE (1, 5, 8, 10)

BIRKHOFF (1, 4)

WHITNEY (2)

STEWART (2, 3)

PLESKER (3, 7, 8)

GOEHL (3, 5)

MAYER, WALTER (3)

SINGEL (5)

BICKLOW (5, 6)

ELIOT, T. S. (7)

STRAUSS (10)

EARLE (10)

NOBEL (15)

VERLES (1, 2, 4, 5, 8, 13)

DODDS (2)

WARREN (2, 3)

VON NEUMANN (3, 5, 6)

KARSKENHISE

WINNER, ROBERT (4, 6)

WEYL (5, 8)

EINSTEIN (6, 8, 11, 12, 16)

VINE (9, 10)

ATKINSON (10, 11)

OF HUSSNER (15)

PLACER (3)

Relations WDAI

Academic Activities

Academic Personnel

Academic Organisation

Educational Institutions

Administration

Corporation

Academic Procedures

Biographical

Interview with
Horse 6/21/56.

Filed in
Vertical File
under Horse
Interviews.

1956

7/16

SCHOOL OF HISTORICAL STUDIES
✓ SCHOOL OF MATHEMATICS
PROFESSORS
MEMBERS
FACULTY
PARTICIPATION IN ADMINISTRATION
ECONOMICS
HARVARD
GEST ORIENTAL LIBRARY
PRINCETON UNIVERSITY
GENERAL
OPPENHEIMER
FERGUSON
TOYNBEE
ELIOT
PLACZEK
KENNAN
DYSON
STEWART
VINER
ALEXANDER

RIEPLER
WARREN
MAYER
GODEL
EARLE
DOUGLAS
STRAUSS
FRANKL

Academic Organization

Academic Personnel

Academic Activities
Educational Institutions
Facilities
Relations WOA
Publications
Biographical

Interview with Robert Oppenheimer, July 16, 1956.

Filed in Vertical File under Oppenheimer Interviews.

1956

9/19

✓ SCHOOL OF MATHEMATICS

Academic Organization

GENERAL (TENURE)

Academic Procedures

Letter from E. L. Woodward to Oppenheimer, September 19, 1956,
regarding:

(1) Appointment of Borel and Serre to professorships in the School of Mathematics, and saying, "...Anyhow, as far as my judgment goes (and it obviously doesn't go far in choosing mathematicians!) both proposals seem to me reasonable..." and that he thinks the School of Mathematics has a good claim to the next nomination to a professorship.

(2) He doesn't think it prudent to select a man of 32 years who will be eligible to hold his professorship for 35 years. He thinks 35 years in one place seems to be too long. He can't think of anything short of an exceptional invitation such as that accepted by von Neumann which would attract anyone away from the Institute.

D, Woodward, E. L.

1956

12/10

PRINCETON UNIVERSITY

✓ SCHOOL OF MATHEMATICS

SALARIES

BENEFITS

NATIONAL RESEARCH COUNCIL

ROCKEFELLER (G. E. B.)

VEBLEN, O.

FLEXNER

EINSTEIN

EISENHART

WEYL

LEFSCHETZ

ALEXANDER

Relations WPAI

Academic Organization

Academic Personnel

Foundations

Biographical

Luncheon conversation with Veblen, 12/10/56.
Filed in Vertical file under Veblen Interviews.

SCHOOL OF MATHEMATICS

Academic Organization

MATHEMATICS

Academic Activities

PHYSICS

DIRECTOR

Administration

MEMBERS

Academic Personnel

VEBLEN, O.

Biographical

MONTGOMERY

AYDELOTTE

FLEXNER, A.

Interview with Dr. Veblen, December 12, 1956.

Filed in Vertical File under Veblen Interviews.

1957

Second Term

MEMBERS (PERMANENT)

Academic Personnel

SCHOOL OF HISTORICAL STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

School of Historical Studies: of 14 permanent members, 8 professors; 3 professors emeriti, and 3 permanent members who do not work at or serve I. A. S.: (Viner, Weitzmann, & Witrany).

School of Mathematics: of 15 permanent members, 11 professors; 1 professor emeritus (V.); and 3 permanent members: Alexander (not working I. A. S.), Bigelow, Goldstein--neither professorial material.

This means that permanent member classification is on way out as intermediate professorial category, in fact, that it is gone.

1957

2/14

GENERAL EDUCATION BOARD

Foundations

JOHNS HOPKINS

Educational Institutions

BROOKINGS INSTITUTE

DEGREES

Academic Procedures

SCHOOL OF HISTORICAL STUDIES

Academic Organization

✓ SCHOOL OF MATHEMATICS

STEWART, W. W.

Biographical

FLEXNER, ABRAHAM

FLEXNER, SIMON

FOSDICK, RAYMOND

Interview with W. W. Stewart, February 14, 1957.

Filed in Vertical File under Stewart Interviews.

1957

2/22

APPOINTMENTS
MEMBERS
STIPENDS

✓ SCHOOL OF MATHEMATICS
SCHOOL OF HISTORICAL STUDIES
SCHOOL OF HUMANISTIC STUDIES
SCHOOL OF ECONOMICS AND POLITICS

PRINCETON UNIVERSITY

VEBLER, O.
WEED
FLINNER
MURPHY
FANNEY
KINSTEIN
VON NEUMANN

Academic Personnel

Academic Organization

Relations WDAI

Biographical

Interview with Professor Veblen, February 22, 1957.

Filed in Vertical File under Veblen Interviews.

1957

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POLICIES

Administration

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HISTORICAL STUDIES

GENERAL

Academic Organization

WEINBERG, BERNARD

Biographical

Interview with Bernard Weinberg, March 8, 1957.

Filed in Vertical File under Weinberg Interviews.

1957

3/31

✓ SCHOOL OF MATHEMATICS

Academic Organization

SCHOOL OF HISTORICAL STUDIES

BOAS, GEORGE

Biographical

VEBLEN, O.

Interview with George Boas, March 31, 1957.

Filed in Vertical File under Boas Interviews.

1957

4/15

ALL SOULS (OXFORD) (1, 2, 3)

Educational Institutions

INSTITUTE HISTORY (1, 3)

Institute History

SCHOOL OF HISTORICAL STUDIES (1, 4)

Academic Organization

SCHOOL OF MATHEMATICS (1, 2, 4)

GENERAL (1, 2)

Academic Organization

APPOINTMENTS (2)

Academic Personnel

WOODWARD (1)

Biographical

VLEMMING, A. (1, 2)

FRANKFURTER (3)

OPPENHEIMER (3)

KEYNES (3)

Interview with Sir Llewellyn Woodward, April 15, 1957.
Filed in Vertical File under Woodward Interviews.

1957

6/6

PARTICIPATION IN ADMINISTRATION (1)	Academic Personnel
ADMINISTRATION <u>POLICIES</u> (1)	Administration
SCHOOL OF ECONOMICS AND POLITICS (1,2)	Academic Organization
ECONOMICS (1, 2)	Academic Activities
✓ SCHOOL OF MATHEMATICS (1)	Academic Organization
INSTITUTE HISTORY (2)	Institute History
FLANNERY (1)	Biographical
SLAY, HENRY (2)	
LEIDENBORG (2)	
STEWART, WALTER W. (1, 2, 3)	

Interview with Walter W. Stewart, June 6, 1957.

Filed in Vertical File under Stewart interviews.

ARCHAEOLOGY (1, 2)

SCHOOL OF HUMANISTIC STUDIES (1)

✓ SCHOOL OF MATHEMATICS (2)

PRINCETON UNIVERSITY (1, 2, 3)

GOLDMAN, HETTY (1, 2, 3)

PLEKHA, A. (1, 2, 3)

ALEXANDER (2)

EINSTEIN (2)

OPPENHEIMER (2)

MOREY (2, 3)

Academic Activities

Academic Organization

Relations WPAI

Biographical

Interview with Miss Hetty Goldman, June 7, 1957.

Filed in Vertical File under Goldman Interviews.

1957

6/14

ASSISTANTS

Academic Personnel

✓ SCHOOL OF MATHEMATICS

Academic Organization

EINSTEIN, A.

Biographical

DUKAS

^P
~~BEYBE~~

VON NEUMANN

SZILARD

Interview with Miss Dukas, June 14, 1957.

Filed in Vertical File under Dukas Interviews.

1957

6/27

FOUNDERS (1, 4, 5)	Corporation
BUILDINGS AND GROUNDS (1)	Facilities
PARTICIPATION IN ADMINISTRATION (2, 3)	Academic personnel
APPOINTMENTS (4, 5, 6)	
ECONOMICS (4)	Academic Activities
ARCHAEOLOGY (4)	
GENERAL (4)	Finance
SCHOOL OF HUMANISTIC STUDIES (4, 6)	Academic Organization
✓SCHOOL OF MATHEMATICS (6)	
GOLDMAN (1, 2, 3, 4, 5, 6)	Biographical
AYDELOTTE (1, 3, 4)	
HOUGHTON (1)	
OPPENHEIMER (2)	
VEBLEN (3, 6)	
MORSE (3)	
FLEXNER (4, 5, 6)	
THOMPSON (4)	
BAMBERGER, LOUIS (5)	
BAMBERGER, LAVINIA (5)	
MERRITT (6)	
PANOFSKY (6)	
DE TOLNAY (6)	
<i>Einstein (1, 2, 3, 6)</i>	

Interview with Hetty Goldman, June 27, 1957.

Filed in Vertical File under Goldman Interviews.