THE INSTITUTE FOR ADVANCED STUDY

SCHOOL OF MATHEMATICS

MINUTES

1935-1960

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held

October 8, 1935

PRESENT: Dr. Flexner; Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

1.	Dr. Flexner suggests that one of the members of the group should be appointed to keep in touch with the desires and opinions of the group on current questions and to report them to him. This suggestion is accepted. Professor von Neumann is appointed to do this for the current year.

2.	Professor Weyl suggests that minimum stipends should be fixed at $1500 a year for single, and $1800 a year for married appointees, with increases possible if special reasons exist. The same should hold for assistants. Dr. Flexner reminded the group of the importance of keeping as much freedom of action as possible. The above program was accepted as a general policy, allowing for exceptions in individual cases.

3.	Professor Weyl discusses the question to what extent the group should feel responsible for the future of grantees. It is agreed that while a certain amount of feeling of responsibility can obviously not be avoided, it should be our general policy not to assume explicitly such a responsibility, and we should add some remark to this effect to the letters which go out to candidates and those who recommend candidates. This change in the text of the letters will be submitted to Dr. Flexner.

4.	Professor Veblen reports that the librarian has informed him about an agreement to the effect that the Institute will purchase books through the University purchasing organization, and that the Institute books will provisionally be placed in the University's general library, but be accessioned separate-

ly and have special Institute bookplates. Miss Shields has already made sug-

gestions as to what mathematical books the Institute should purchase in order to

complete, and chiefly to duplicate where that is necessary, the University col-

lection. The amount needed for mathematics for this year will not exceed a

limited sum, keeping within the budget. A program of this type was found ac-

ceptable. The details will be worked out experimentally.

5. The question of the necessity of more stenographic facilities is

discussed. It is agreed in principle that stenographic assistance should be

provided for the leading members of the temporary group (such as professors on

leave from other institutions) in addition to the permanent members of the staff,

as far as their needs allow. The same should apply to reprints, etc. The

necessity of some further funds for this purpose is generally admitted, and ac-

cepted by Dr. Flexner. (The exact amount is not specified, and these details,

together with others, will have to be clarified subsequently, on the basis of

what the year's budget allows.)

6. It is agreed to change the term "grant" to stipend, and the title

"Workers" to Members.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
October 28, 1935.

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

1.   Professor Veblen reports that an invitation has been extended to
O. Szasz to deliver two lectures in Princeton during the week of November 4-9,
staying at the Nassau Club as a guest of the Institute for Advanced Study and
of Princeton University jointly.   The lectures are arranged, and O. Szasz is
paid, by the Institute of International Education.

2.   Professor von Neumann reports that an invitation to C. Kuratowski
of Warsaw for 6-8 weeks in March-April 1936 under the joint auspices of the In-
stitute and Princeton University (and possibly other institutions also) has been
suggested by Professor Lefschetz.   Professor Lefschetz has already made a direct
proposition to this effect to Dr. Flexner.   Dr. Flexner informed Professor von
Neumann that he could secure the Institute's contribution to Kuratowski's honorar-
ium from other sources than the regular budget of the School of Mathematics.
It is agreed that an invitation to Kuratowski is generally welcome and desirable.
Therefore a recommendation to this effect will be made to Dr. Flexner, under the
conditions outlined above.

3.   Professor Weyl reports that Professor Irving has informed him that
R. Carnap of Prag will be in this country in the course of this academic year.
It would be desirable that the Institute and the University should cooperate in
some way to have him visit Princeton.   The desirability of an arrangement of
this type is agreed, and it is decided to call Dr. Flexner's attention to this
matter.

4. Some of the stipends for the year 1936-7 are discussed. The following decisions are reached:

a) M. H. Stone of Harvard will be invited for the first half of 1936-7. (He wishes to spend the other half abroad.) The Institute will, on the 50% basis, pay 1/4 of his yearly salary (1/2 to be paid by Harvard, 1/4 by the Guggenheim Foundation). Probably: 1/4 of $7000 = $1750. Professor von Neumann will negotiate.

b) Joseph M. Thomas of Duke, and Francis D. Murnaghan of Johns Hopkins, will be invited for the full year 1936-7, on the 50% basis. Probably: ½ of $4000 = $2000, and ½ of $6000 = $3000 (?). Professors Veblen and von Neumann respectively will negotiate.

c) If either candidate under b) refuses, W. J. Webber of Toronto will be considered.

d) A. Weil of Paris-Strasbourg, W. Hurewicz of Amsterdam, and M.H.A.Newman of Cambridge, England, will be invited for 1936-7 (as tentatively agreed last year). The Institute will offer $2000 to each. Professor von Neumann will negotiate with A. Weil, Professor Alexander with the others.

e) In order to distribute stipends to younger mathematicians on the same principles as last year, letters will again be sent, the text being essentially the same as last year. Professor Weyl is put in charge of this matter. At present it is only agreed to earmark about $7000 for this purpose. Cairns of Lehigh will be considered in this group as 50% of his salary is about $1750 - Professor Morse will inquire about his possibilities.

<div align="center">

Résumé
Mathematics

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M.H.Stone	$ 1,750	
J.M.Thomas	2,000	
F.D.Murnaghan	3,000 (?) Corrected 3,250	
A.Weil	2,000	
M.H.A.Newman	2,000	
W.Hurewicz	2,000	
Junior stipends	7,000	
	$19,750	Corrected 20,000
BALANCE REMAINING	250	---
	$20,000	$20,000

5. As to Physics stipends, the following decisions are reached:

f) Professor Einstein proposes to invite Mattyson of Warsaw (?) or Paris (?), stipend about $2000. Professor Einstein is charged to find out the details of Mattyson's case from J. Hadamard of Paris.

g) Invitations to R. Tolman of Pasadena and J. H. Van Vleck of Harvard are discussed. It is decided to invite Van Vleck on the 50% basis. Probably: ½ of $8000 = $4000. Professor Weyl will negotiate.

No decisions concerning the visiting professorship are taken as the funds for it have not yet been appropriated. It is decided, however, that another meeting will be called soon to discuss this and related questions.

6. It is decided to renew the invitation for a lecture previously extended to Tamarkin for this year (honorarium $100), and then postponed on Tamarkin's request. Professor von Neumann will negotiate.

7. The invitations in a), b), d), g), and 6, will be sent out as soon as this list is approved by Dr. Flexner.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held December 14, 1935.

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

1. Several members of the group called attention to the Jubilee of Professor J. Hadamard (Paris) on January 7. It is decided to send him a telegram of congratulations from the group. Professor Weyl will take care of this.

2. Professor Veblen informs the group that Dr. Flexner communicated to him his opinion

a. To adopt the rule that only persons possessing the Ph.D. degree should be admitted to the Institute.

b. That no part-time appointments should be made in future of assistants or stipend-holders (who at the same time undertake teaching obligations in the University, or the like).

As to point a, the unanimous vote of the group is to ask Dr. Flexner to reconsider his decision, because it is believed that such a rule would cause serious difficulties. It would in the future exclude from consideration, for instance, all "junior fellows" of the Harvard Society of Fellows, to whom their statute prohibits working for the Ph.D.; and as the Ph.D. is not general in England, it might cause difficulties with foreign candidates also.

The group agrees with these rules inasmuch as it is necessary to simplify administration and avoid complications, but objectively it would seem preferable that the Institute should have the right to make exceptions, exercising great caution in so doing.

3. Professor von Neumann informs the group that Dr. Flexner has called attention to the following facts: The announcement made this year in

Science concerning the stipends in mathematics (which is a repetition of last year's announcement) is very similar to the conditions for admission as formulated in the bulletin, and as the standards for stipends are naturally essentially higher than for admission, in future a different statement should be made, placing more emphasis on the necessity of independent research by the candidates. The group agrees with this idea.

4.   Appointments in Physics.   Professor Weyl reports that Professor J. H. Van Vleck of Harvard, who had been invited for the year 1936-37 on the 50-50% plan, has declined.   It is decided to invite Professor J. C. Slater of Massachusetts Institute of Technology on the same basis.   Professor Weyl is asked to take care of this.

5.   Professor Veblen informs the group that several European mathematicians will come to this country in the fall of 1936 for the Harvard Tercentenary Celebration.   They are E. Cartan (Paris), T. Levi-Civita (Rome), and G. H. Hardy (Cambridge).   It is decided to extend to them invitations to come to Princeton and lecture here for longer or shorter periods, as may turn out to be workable.   The cooperation of the University will have to be sought.   Professor Veblen is asked to take the matter up with Dean Eisenhart.

6.   Professor von Neumann reports that Dr. S. Ulam of Lwow (Poland), for whose contemplated visit to Princeton a contribution of $300 had been voted last year, had not arrived as yet.   Professor von Neumann is charged to communicate with Dr. Ulam so as to ascertain whether he will arrive in Princeton at latest by the beginning of February.   If this should not be the case, the amount allocated should be used for other purposes.

The above recommendations were referred through Professor von Neumann to Mr. Flexner and he approved, calling attention to the extreme caution needed in

making exceptions because of the real interest of the individuals and the necess-
ity of keeping in agreement with the University and its several departments.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
January 20, 1936
PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen and Weyl.

1. Professor Veblen reports that Ridenour has been appointed to an
instructorship in the Physics Department of the University. The appointment
of Dr. W. J. Henderson for the remainder of the academic year is proposed and
approved and will be recommended to Dr. Flexner. His stipend is to be $750.
$1,000 are left owing in part to the resignation of Dr. Willard E. Bleick. It
is decided to recommend the grant of a stipend of $750 for the second term to
Dr. Roman Smoluchowski, and to raise Dr. Banesh Hoffmann's stipend from $750 to
$1,000.

2. Professor Morse reports that Professor T. F. Cope has informed
him of his desire to attend the Institute next year. On the basis of present
regulations he would have to pay the tuition, and it is voted to recommend to
Dr. Flexner the remission of his tuition.

3. Professor Veblen reports that the visiting professorship will pre-
sumably not be available next year. He takes up the question of an invitation
to Hardy, Levi-Civita and Cartan, who will attend the Harvard Tercentenary. He
points out that it will be possible for the Institute to pay an honorarium of
about $2000 for each of them, from a separate fund. The group empowers him to
negotiate the matter of the invitation.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held

February 3, 1936

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen and Weyl.

1. Professor Weyl reports the answer of Professor Slater of Massachusetts Institute of Technology to the invitation extended to him on a 50-50 basis for 1936-37. Professor Slater is unable to come for the entire year, but proposes to come for the second term. Furthermore he recommends Professor N. H. Frank of the Physics Department of the Massachusetts Institute of Technology for a similar invitation for the first term. It is decided to recommend both invitations to Dr. Flexner. Professors Slater's and Frank's salaries being $10,000 and $3,600 respectively per year, 50% of the half year's salaries will be $2,500 + $900 = $3,400.

2. On motion of Professor Veblen it is decided to recommend a stipend of $180 for the rest of the current year to Dr. Achille Bassi of the University of Turin, who is at present in Princeton on a small Italian stipend.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held

March 2, 1936

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

      1. Professor Alexander reports that Newman cannot accept our invitation for the year 1936-37, but may be able to come for a few months. Under these conditions it is considered preferable to postpone the invitation for another year. It is agreed, however, to hold part of his stipend in reserve until the matter is completely clarified. Professor Alexander is asked to conclude the negotiations.

      2. The remaining applications for stipends are dealt with. The following stipends are granted:

<div style="text-align:center">

Mathematics
Reinhold Baer ---------	$1,800
George Comenetz -------	1,500
Marshall Hall ---------	1,500
John F. Randolph ------	1,800
Moses Richardson ------	1,800
	$8,400

Theoretical Physics
Eugene Feenberg -------	$1,500
Robert Serber ---------	1,800
	$3,300

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Professor von Neumann is charged to inform the grantees, except Baer, who has been informed by Professor Weyl.

      The following stipends were granted at previous meetings and have been formally accepted, to wit:

<div style="text-align:center">

Mathematics (meeting of October 28, 1935)
W. Hurewicz ----------	$2,000	
Francis D. Murnaghan -	3,250	
Marshall H. Stone ----	1,750	
Joseph M. Thomas -----	2,000	
André Weil (1 term) --	1,500	(changed from $2000 for full year)
	$10,500	

Theoretical Physics (meeting of February 3, 1936)
N. H. Frank (1st term) $	900
John C. Slater (2d ")	2,500
	$3,400

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This makes a total of $18,900 for Mathematics, and $6,700 for Theoretical Physics, leaving thus a balance of $1,100 and $3,300 respectively.   For these funds, as well as what may become available later through resignations, the following names will be reconsidered:

Mathematics
Paul Erdös
Pierce W. Ketchum
Saunders MacLane
John C. C. McKinsey
William A. Mersman
Charles B. Tompkins II
Stanislaw M. Ulam

Theoretical Physics
John F. Carlson
William J. Henderson
Lothar Nordheim
Nathan Rosen
Roman Smoluchowski

The following applications are declined:

Melvin Avrami
P. Y. Chou
Ruel V. Churchill
John H. Curtiss
William L. Duren
Aaron Fialkow
Paul Gombas
Israel Halperin
Joseph O. Hirschfelder
Madeline Levin
Wilhelm Maak
Daniel Pedoe
Irwin E. Perlin
W. Prenowitz
Raphael M. Robinson
Hyman Serbin
George W. Starcher
John P. Vinti
Stefan E. Warschawski
David H. Weinstein
Charles Wexler
Max A. Zorn
Herbert S. Zuckerman

3.   Professor Einstein reports that he has not had further news concerning Mattyson.   The matter will therefore not be considered this year.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held April 20, 1936

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

1. Professor Veblen reports that the fund appropriated for stipends in Mathematics and Theoretical Physics has been reduced to $25,600; that is, to a sum which will exactly cover the allocations already made. The group feels, however, that certain further commitments exist of a less definite sort. Therefore Professors Veblen and von Neumann are charged to negotiate with Dr. Flexner in order to secure funds for the following further stipends:

In Theoretical Physics

    Nathan Rosen --------- $1,800 **(corrected to $1,500)**
    John F. Carlson ------   1,500 (or less if the University is willing to take
                                        a share)
    L. Infeld -----------   300 (for one term)
                   or   600 (for a full year)

In Mathematics

    Extraordinary grants to Drs. Stewart S. Cairns and Lee R. Wilcox have previously been approved by Dr. Flexner. It is hoped that these grants are not affected, and Professors Veblen and von Neumann should make sure that this is so.

    Furthermore, it may become necessary to increase the stipend of Professor N. H. Frank of Massachusetts Institute of Technology by $50 in case he gets a raise of $200 from his home institution, the possibility of which he has signified.

    2. Professor Alexander informs the group concerning the status of negotiations with Professor M.H.A. Newman. The desire of the group is to have his visit postponed to the year 1937-38, considering the difficulties which have developed in respect to 1936-37. Professor Alexander will inform Professor Newman in this sense.

3.   Professor von Neumann reports that Dr. Serber, already offered a stipend in Physics, has asked to be permitted to make his final answer at the end of May.   It is decided to ask him to give his reply before the middle of May.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held

October 22, 1936

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

1. Professor Veblen reports that a request has been made by the Editors of the Journal of Symbolic Logic that the Institute should give the Journal a subvention of $100, as Princeton University has already done. It is decided to recommend to Dr. Flexner that the same procedure should be followed as that adopted by Princeton University, namely to appropriate for this year a total of $100 (including the Institute's earlier contribution of $25 as a Sustaining Member of the Association for Symbolic Logic), and to consider next year a similar appropriation.

2. Professor Veblen moves to recommend to Dr. Flexner extension of an invitation to Professor Dirac of Cambridge, England, for a temporary membership in the Institute for 1937-8, under the same conditions under which he held his preceding Visiting Professorship, his salary to be $10,000 for the year.

3. Professor Weyl raises the question whether the stipends of the Institute should again be publicly announced, as previously. It is decided to submit an announcement to Dr. Flexner for approval.

4. The following suggestions concerning stipends for 1937-8 are discussed:

<u>Mathematics</u>

(Alexander)   Professor Eduard Čech, Brno, Czechoslovakia (for one term)

(Veblen)   Professor William W. Flexner, Cornell University

(Weyl)   Professor Erich Hecke, Hamburg, Germany (for one term)

(Veblen)   Dr. Vaclav Hlavaty, Prague, Czechoslovakia (the cooperation
            of the University might be sought in this case)

(Weyl)   Professor Dunham Jackson, University of Minnesota

(Veblen)   Professor C. C. MacDuffee, University of Wisconsin

   "   Professor A. D. Michal, California Inst. of Technology

(Morse)   Professor C. B. Morrey, University of California, Berkeley

(Alexander)   Professor M. H. A. Newman, Cambridge, England (the invita-
               tion to whom for next year had been decided on previ-
               ously, and with whom Alexander had negotiated recently)

Veblen mentions that Dr. Nikola Obrechkoff, Sofia, Bulgaria, has written
            to him asking for consideration

(Morse)   Professor Oystein Ore, Yale

(Veblen)   Professor Kurt Reidemeister, Marburg, Germany

(von Neumann) Professor Aurel Wintner, Johns Hopkins

<u>Physics</u>

(Einstein)   Dr. Leopold Infeld

            : Professor Edwin C. Kemble, Harvard
(Morse   :
  and   : Professor Linus Pauling, California Inst. of Technology
 Veblen)   :
            : Professor Richard C. Tolman, California Inst. of Technology

It is decided to recommend to Dr. Flexner the following appointments,
and to defer action on the others until the next meeting:

Mathematics

Professor Erich Hecke, Hamburg ---------------------- $ 1,500[1]
    (Veblen to write)

Dr. Vaclav Hlavaty, Prague ---------------------- 1,000[2]
    (To be negotiated by Veblen with Princeton
    University and Hlavaty)

Professor Cyrus C. MacDuffee, Wisconsin ------------ 2,500[3]
    (Veblen to write)

Professor Aristotle D. Michal, Cal. Tech. ---------- 1,000[4]
    (To be negotiated by Veblen with Princeton
    University and Michal)

Professor Charles B. Morrey, Univ.Calif., Berkeley   1,500[3]
    (Morse to write about this to Evans)

Professor M. H. A. Newman, Cambridge ---------------- 2,000[5]
    (Alexander to write)

Professor Aurel Wintner, Johns Hopkins ------------- 1,500[3]
    (von Neumann to write)
                                $11,000

Physics

Professor Linus Pauling, Cal. Tech. ---------------- $ 4,500[3]
    (Weyl to write)

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1 Stipend offered for one term

2 It is hoped that a like amount will be contributed by Princeton Univ.

3 This is 50 per cent. of his estimated salary, the invitation to be given
    on the condition that the other 50 per cent. be contributed by his
    home institution

4 This is 25 per cent. of his estimated salary (probably too high). It is
    hoped that Princeton University will pay another 25 per cent. and the
    Cal. Tech. 50 per cent.

5 This stipend to be offered by the Institute in case he comes for a year;
    to be reduced to $1500 if he can come for only a half year

5.   Professor von Neumann informs the group that the Editors of the Annals of Mathematics desire to limit publication to papers of original and not of an expository character, and ask for approval of this policy.   Such action has been taken by the Mathematics Department of the University, on suggestion of Professor Lefschetz.   Approved.

The group expresses the desire to expand the possibilities for publication which exist already in the organization for mimeographing lectures and which, in particular, could be used for local papers of the above-mentioned type.   Concerted action with the Mathematics Department of the University in this matter would be desirable.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
December 12, 1936

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen, and Weyl.

    1. Professor Veblen informs the group that the negotiations with the
Mathematics Department of Princeton University concerning joint invitations to
Professor A. D. Michal of California Institute of Technology, and Dr. Vaclav Hlavaty
of Prague, are not yet concluded.   It is decided that if they should not be con-
cluded the Institute will take no further action on these matters.   (Note: Pro-
fessor Veblen has been informed since that the University does not intend to co-
operate in these two invitations.)

    Professor Hecke of Hamburg has signified his willingness to accept our
invitation, but has still to obtain a leave of absence from his authorities.   A
desire is expressed that his visit should be arranged in such a manner as not to
endanger a visit from Professor Artin of Hamburg.

    2. Professor Weyl reports a preliminary answer from Professor Pauling
of the California Institute of Technology.   (Note: Two days later Professor Paul-
ing informed Professor Weyl of his inability to accept our invitation.)

    3. Professor Weyl proposes an invitation to Professor Carathéodory of
Munich -- who is now lecturing at Madison, Wis. -- for a lecture.   Professor von
Neumann suggests that a similar invitation should be extended to Professor Tamar-
kin, of Brown University.   Both are approved, and Professor Weyl is charged to take
up the matter with Dr. Flexner.

    4. Professor von Neumann reports that Dr. Flexner asks the group to
set aside $3000 from the general stipend fund, which may become necessary as a
contribution to the $10,000 required for an invitation to Professor Dirac of
Cambridge.

5. It is decided, on Professor Veblen's motion, to allocate $1000 for Professor Artin of Hamburg, who will probably be in this country from the summer of 1937 on (at Stanford, and probably New York University). Professor von Neumann is charged to inform Dr. Flexner of this suggestion, which is made with the intention of inducing one of the Foundations (Rockefeller or Guggenheim) to make a similar grant to Professor Artin.

6. Professor Einstein informs the group of his intention to take Dr. Peter G. Bergmann (formerly of Prague) as his assistant. He will take up the matter with Dr. Flexner.

7. The following stipends are voted for 1937-8:

Prof. Hubert S. Wall, Northwestern Univ., Evanston, Ill. (the usual
    50-50 arrangement) -- $1,750

Dr. John F. Randolph (who has an Institute stipend for 1936-7) --------- 1,800

8. The following candidates for 1937-8 are reserved for future consideration: Drs. John F. Carlson, Eugene Feenberg, Antonio I. Flores, Marshall Hall, Leopold Infeld, Rufus Oldenburger (Assistant Professor at Armour Institute of Technology, Chicago -- this would be the usual 50-50 arrangement), Moses Richardson; Claude Chevalley of Paris, Samuel Eilenberg of Warsaw, and Paul Erdős of Budapest.

9. The present status of allocations of stipends is as follows:

Stipend Fund --- $30,000

Stipends settled
    Dr. Achille Bassi ---------------------------------- $1,500
    Prof. Cyrus C. MacDuffee, Univ.of Wis.,"not exceeding 2,500"
    Prof. Charles B. Morrey, Univ. of Calif. ----------- 1,350
    Prof. M.H.A.Newman, Cambridge, Eng. ---------------- 2,000
    Dr. John F. Randolph (now in Princeton) ------------ 1,800
    Prof. Hubert S. Wall, Northwestern Univ. ----------- 1,750
    Prof. Aurel Wintner, Johns Hopkins ----------------- 1,750 $12,650

Stipends in process of negotiation
    Prof. Emil Artin, Hamburg -------------------------- $1,000
    Reserve for Prof. P.A.M.Dirac, if needed ----------- 3,000
    Prof. Erich Hecke, Hamburg ------------------------- 1,500 5,500 18,150

Balance available for allocation ------------------------------------- $11,850

MATHEMATICAL MONOGRAPHS

Resume of a discussion on December 21, 1936, by Professors Eisenhart, Lefschetz, Veblen, von Neumann, and Weyl.

It seems desirable to publish a series of mathematical monographs under the joint auspices of the Mathematics Department of Princeton University and the School of Mathematics of the Institute for Advanced Study, for the following reasons:

1. Many lectures given in both institutions during the last year have dealt with subjects on which no modern textbook, or none with the same scope, exists. The aggregate experience with mimeographing such lectures indicates that there is a countrywide demand for books or monographs on these subjects. In spite of an absolute absence of publicity, and in spite of the newness of the entire mimeographing scheme (it has been thoroughly organized only since 1935), notes of practically all advanced courses which have been mimeographed have been sold to the extent of 100-200 copies.

2. A number of further monographs or treatises are planned by members of the Princeton group, e.g., by Lefschetz, Morse, Tucker, Veblen, von Neumann, Weyl.

3. It should be remarked that various facilities of the American Mathematical Society could be made use of for some of these publications, in particular the Colloquium Series of the American Mathematical Society. But the present situation offers a chance to inaugurate at Princeton a series of publications on a high scientific level, and unhampered by all those secondary considerations (geographical, etc.) to which the American Mathematical Society must necessarily pay attention.

4. A further argument in favor of a "domestic" system of publications versus the A.M.S. channels may be found in the success of the Annals of Mathematics in which the direct control by the small and active group of Princeton mathematicians has certainly been an essential element.

5. It would be possible to include in the "domestic" series, modern textbooks on topics which have undergone essential changes in the last decades. Similar undertakings in other countries are an indication -- if one is needed -- that this is highly desirable. This could not be done in the Colloquium Series, which has to restrict its publications to original research. E.g., Tucker is writing a book on "Elementary Topology" which would answer an actual need, and which falls in this class.

6. It is agreed that from the very beginning outside authors should also be attracted. Thus, scientifically this undertaking would be primarily but not exclusively one of the Princeton group,- though the control and the responsibility would remain entirely within the group, i.e. with a Board of Editors selected from it.

7. The financing should be effected by initial grants from Princeton University and the Institute for Advanced Study which could be used as a "revolving fund". If they are obtained, some publishing house might be approached; on this basis:

a) The "revolving fund" would pay the estimated "physical cost" of producing the book ($5-6 per page).

b) The publishers would take care of printing, advertising, and selling.

c) The publishers would return a royalty of 50 per cent. to the "revolving fund" and to the authors.

Preliminary negotiations with the Waverly Press and with Prentiss and Hall, indicate that this would be workable.

8. The initial contributions mentioned under §7 should be $1000 from each institution.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 23, 1937, and continued February 25, 1937

PRESENT: Professors Alexander, Morse, von Neumann, Veblen and Weyl, and
Professor Einstein on February 23 but not February 25

1.   The recommendation of the Editors of the new series of mathemati-
cal monographs (Morse, Tucker, Robertson) has been received for an appropriation
of $300 by the Institute (and the same amount by the University) to cover the
cost of refereeing, editing and preparing manuscripts during the first year.
It is decided to recommend to Dr. Flexner such an appropriation.

2.   Morse suggests that the appointment of a Library Committee
seems desirable for dealings with the Fine Hall Library.   A committee of two,
consisting of Morse and Alexander, is appointed for this purpose.

3.   Veblen informs the group that the Mathematics Department of
Princeton University has voted a contribution of $1000 towards an invitation
to Professor Václav Hlavatý of Prague to give lectures in Princeton for the
year 1937-38, expecting a like contribution from the Institute.   It is decid-
ed to recommend to Dr. Flexner the appropriation of $1000 for this purpose.
Professor Veblen will extend the invitation in cooperation with the University
authorities.

4.   The following stipends will be recommended to Dr. Flexner:

Dr. John F. Carlson -------------------------------	$ 1,500	(von Neumann to negotiate)		
Dr. Eugene Feenberg ---------------------------	1,500	("	"	"	")
Dr. Pierce W. Ketchum ------------------------	1,800	(Weyl	"	")
Mr. Anthony P. Morse, 109 George Street, Providence, R.I. ------------------------	1,250	(von Neumann "	")
Mr. Cecil J. Nesbitt, 492 Huron Street, Toronto, Canada -----------------------	1,500	(Weyl	"	")
Dr. Moses Richardson -------------------------	1,800	(Morse	"	")
Mr. Malcolm F. Smiley, 816 East 53d Street, Chicago, Ill. --------------------------	1,500	("	"	")

$10,850

Remark. The total stipends for next year are therefore as follows:

Prof. Emil Artin, Hamburg	$1,000
Dr. Achille Bassi	1,500
Dr. John F. Carlson	1,500
Prof. P.A.M. Dirac (reserve, if needed) -	3,000
Dr. Eugene Feenberg	1,500
Prof. Erich Hecke, Hamburg	1,500
Prof. Vaclav Hlavatý, Prague	1,000
Dr. Pierce W. Ketchum	1,800
Prof. Cyrus C. MacDuffee, Wisconsin	?2,500
Prof. Charles B. Morrey, California	1,350
Mr. Anthony P. Morse, Brown Univ.	1,250
Mr. Cecil J. Nesbitt, Toronto	1,500
Prof. Max H. A. Newman, Cambridge, Eng.	2,000
Dr. John F. Randolph	1,800
Dr. Moses Richardson	1,800
Mr. Malcolm F. Smiley, Chicago	1,500
Prof. Hubert S. Wall, Northwestern	?1,750
Prof. Aurel Wintner, Johns Hopkins	1,750
	$30,000

5.   Since there are reasons to believe that some of the appointees will not accept, it is agreed that in such a case the following among the applicants would be considered for 1937-38:

Mr. Howard W. Alexander, Princeton
Dr. Paul Erdös, Budapest
Dr. Bernard Friedman, now N.Y.U.
Dr. Malcolm H. Hebb, Harvard
Dr. Leopold Infeld
Prof. Claiborne G. Latimer, Kentucky
Tadasi Nakayama, Osaka
Dr. Richard D. Present, Purdue
Mr. Robert M. Thrall, Illinois
Dr. Rupert Wildt

6.   The following names are noted for later consideration:

Dr. Claude Chevalley
Dr. S. Eilenberg
Prof. William Flexner, Cornell
Prof. Gustav A. Hedlund, Bryn Mawr
Prof. John H. Roberts, Duke Univ.
Dr. Th. Schneider, Frankfurt a.M., Germany
Also, Dr. J.H.C. Whitehead, Oxford, who has applied for 1939-40

The group decides also to take cognizance of the fact that the number of good candidates for stipends seems to be increasing, as compared with former years, and that among those to whom no stipends can be given are a number of quite first-rate candidates.

7. The following candidates are not to be considered, and will be informed accordingly: Walter H. Barkas, George Comenetz, John J. DeCicco, Francis G. Dressel, Walter W. Elsasser, Stanislaw Golab, Herman H. Goldstine, Louis Green, Nathan Kaplan, Bela Lengyel, Harry Levy, John C. C. McKinsey, Ralph D. Myers, Nikola Obrechkoff, Rufus Oldenburger, Leonard I. Schiff, Hans Schwerdtfeger, Alvin Sugar.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
April 12, 1937

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen and Weyl

1. Discussion between Professors Einstein, Veblen and the rest of the group makes it clear that the salary of Professor Einstein's assistant, at present Dr. Peter G. Bergmann, will be paid in 1937-38 from the stipend fund, but that Dr. Flexner has given the information that thereafter Professor Einstein's assistant will be put on the budget as such.

2. Professor Morse informs the group that he intends to appoint as his assistants for 1937-38 Dr. Herbert Busemann and Professor Rufus Oldenburger of the Armour Institute of Technology, Chicago, each on half time. This arrangement has the effect also of making it possible for Professor Oldenburger to come to Princeton next year.

3. It is decided to publish in future in the Bulletin of the American Mathematical Society and in an appropriate physical publication, an announcement of stipends granted by the Institute,- i.e. a list of the grantees.

4. Professor Veblen reads a letter which he wrote to Dr. Flexner on March 24, which makes it clear that the stipend of Professor Haldane of London, if and when he comes to Princeton, will not be paid from the mathematical budget; and which also concerns the status of Dr. Peter G. Bergmann (see §1 above). The letter also enclosed an itemized statement showing a balance remaining of $1,200, since it was no longer necessary to hold on reserve $3000 for Professor Dirac.

Since that letter was written it has developed that another $1000 has become free because Professor Artin will not be able to come to this country next fall. This makes altogether a balance of $2,200.

5.   It is decided to offer Professor Tadasi Nakayama of Osaka, Japan, a stipend of $1,500.

6.   The group states with great regret that it is not possible to offer a stipend to Dr. Paul Erdös of the University of Manchester.   It is decided, however, to ask Dr. Flexner's permission to extend to Erdös now an invitation for 1938-39.   [Remark: Professor von Neumann has since communicated with Dr. Flexner, obtained his permission, and written accordingly to Dr. Erdös.]

7.   It is decided to increase Mr. Anthony P. Morse's stipend by $250, from $1,250 to $1,500, since the funds are now available.

8.   The funds which remain ($2,200 - 1,500 - 250 = $450) will be used by the group as seems best, to give assistance in particular cases which may arise.

9.   The following is a list of those candidates (not all of whom have made application) who should be particularly considered in future years:

```
            Mr. Garrett Birkhoff --------- 1939-40
            Dr. Claude Chevalley --------- 1938-39
            Prof. Haskell B. Curry ------- 1938-39 or later
            Dr. Samuel Eilenberg --------- 1938-39
            Dr. Paul Erdös --------------- 1938-39 (cf. §6 above)
            Prof. William Flexner -------- 1938-39 or later
            Dr. Gerhard Gentzen ---------- 1938-39 or later
            Dr. Stanislaw Golab ---------- 1938-39
            Prof. Gustav A. Hedlund ------ 1938-39
            Dr. J.H.C.Whitehead ---------- 1939-40
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THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
October 2, 1937

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen and Weyl

      1.   Concerning Dr. Kurt Gödel of Vienna, Professor von Neumann stated
that Dr. Gödel appears in good health, and wants to return to Princeton for at
least a part of the year.   Dr. Gödel announced to Professor von Neumann the proof
of a most remarkable theorem.   The mathematics group recommends the appointment
of Dr. Gödel on the staff of the Institute for a term of three to five years, at a
salary as large as is possible (Professor Veblen suggested $4000).   It is under-
stood that Dr. Gödel will probably want to spend the summer term at the University
of Vienna, but the group sees no objection to this.   They hope that it will be
possible for Dr. Gödel to come to this country at once.   They regard Dr. Gödel as
first among the mathematical logicians of the world.

      2.   The group recommends that the following stipends be granted for the
present year:

           Dr. Valentin Bargmann --- $ 500
           Dr. Witold Hurewicz ----- 1,000

and that the stipend of Dr. Achille Bassi be raised to $1,800, and the stipend
of Dr. Anthony P. Morse reduced to $1,300 in view of his receiving $500 from
Princeton University as a part-time instructor;   thus bringing these two latter
stipends to the normal figures.   These changes make the present list of stipend
commitments for 1937-38 as follows:

Dr. Valentin Bargmann --------------- $	500
Dr. Achille Bassi --------------------	1,800
Dr. Peter G. Bergmann ---------------	1,800
Dr. Eugene Feenberg -----------------	1,500
Prof. Erich Hecke (2d term) --------	1,500
Prof. Václav Hlavatý (1st term) ----	1,000
Dr. Witold Hurewicz ----------------	1,000
Forwarded ---------- $	9,100

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              Brought forward ------------- $ 9,100
Dr. Pierce W. Ketchum ----------------   1,800
Prof. Cyrus C. MacDuffee ------------    2,325
Prof. Charles B. Morrey -----------      1,350
Dr. Anthony P. Morse ----------------    1,300
Prof. Tadasi Nakayama ---------------    1,500
Dr. Cecil J. Nesbitt ----------------    1,500
Mr. Max H. A. Newman ----------------    2,000
Dr. John F. Randolph ----------------    1,800
Dr. Moses Richardson ----------------    1,800
Dr. Malcolm F. Smiley ---------------    1,500
Prof. Hubert S. Wall ----------------    1,750
Prof. Aurel Wintner -----------------    1,750
                                        $29,475
BALANCE AVAILABLE FOR ALLOCATION ---       525
                                        $30,000
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3.   It was decided to add the names of Professor Eduard Čech, Mr.

Philip Hall, and Dr. Eduard Teller to the list now reserved for consideration

for future years, which, after omission of Dr. Paul Erdös because of his having

already accepted our stipend for 1938-39, now stands as follows:

```
Mr. Garrett Birkhoff ----------------- 1938-39
Prof. Eduard Čech --------------------
Dr. Claude Chevalley ---------------- 1938-39
Prof. Haskell B. Curry -------------- 1938-39 or later
Dr. Samuel Eilenberg ---------------- 1938-39
Prof. William Flexner --------------- 1938-39 or later
Dr. Gerhard Gentzen ----------------- 1938-39 or later
Dr. Stanislaw Golab ----------------- 1938-39
Mr. Philip Hall, Kings College,
   Cambridge, Eng. -------------------
Prof. Gustav A. Hedlund ------------- 1938-39
Prof. Burton W. Jones, Cornell ------ 1938-39
Prof. L.J.Mordell, Manchester, Eng.- 1938-39 (6 months leave)
Prof. John H. Roberts, Duke -------- [Visiting Lecturer, Princeton
Dr. Th. Schneider, Frankfurt a.M. --                    1937-38]
Dr. Eduard Teller, G.Washington Univ.
Dr. Charles C. Torrance, Case ------ 1938-39
Prof. G. Vranceanu, Universitate
   Cernauti, Roumania --------------- After 1938-39
Dr. J.H.C.Whitehead ----------------- 1939-40
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4.   In regard to the multigraphed mathematical lecture notes of the

Institute and Princeton University jointly, it was agreed that in future we

should exchange with Brown University only our mimeographed notes for such lec-

ture notes as Brown University has to offer, the planographed notes not being included for exchange. [In view of a letter which Professor Tucker had previously written to Professor Archibald, Professor Morse later wrote Professor Archibald that in view of the large number of multigraphed mathematical lecture notes now being put out from Princeton, we should discontinue all exchanges with other institutions except on the basis of monetary value of the publications on both sides.]

  5. It was decided not to change the policy of payment by the Institute for publication expenses of temporary as well as permanent members of the School of Mathematics.

  6. It was decided to leave to Miss Blake the naming to the American Mathematical Society of candidates for ordinary membership on the basis of the Institute's institutional membership.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
November 8, 1937

PRESENT: Professors Alexander, Einstein, Morse, von Neumann, Veblen and Weyl

1. It is noted that subsequent to the meeting of October 2, 1937, the
decision to offer Dr. Bargmann a stipend of $500 was reconsidered and withdrawn,
making the balance still available for allocation $1,025 instead of $525. And
that $1000 of this, with $500 from the fund for lectures, was offered to Dr. Kurt
Gödel in a tentative invitation "to give something like five or ten lectures in
Princeton on the Continuum Problem, at any time during our present academic year".

2. It was voted to recommend that the following stipends be granted: *

                    Mr. Garrett Birkhoff, 1st term -- $1,000
                    Dr. Claude Chevalley ------------- 2,500
                    Prof. Gustav A. Hedlund ($\frac{1}{2}$ salary) 1,750
                    Prof. Kurt Reidemeister --------- 2,500
                                                      $7,750
Previously voted: Dr. Paul Erdös ------------------ 1,500
                                                      $9,250
Balance available for allocation --*-- for 1938-9 ------------ 20,750
                                                      $30,000

3. The following list of candidates remains for later consideration:

                    Prof. Eduard Čech
                    Prof. Haskell B. Curry
                    Dr. Samuel Eilenberg
                    Dr. Eugene Feenberg
                    Prof. William Flexner
                    Dr. Gerhard Gentzen
                    Dr. Stanislaw Golab
                    Mr. Philip Hall of Kings College, Cambridge
                    Prof. Burton W. Jones
                    Prof. P. Jordan of Rostock
                    Prof. L. J. Mordell
                    Dr. E. L. Post
                    Dr. Th. Schneider
                    Dr. Eduard Teller
                    Prof. Tracy Y. Thomas
                    Dr. Charles C. Torrance
                    Prof. G. Vranceanu

---
* Later approved by Dr. Flexner

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 3, 1938

Present: Professors Alexander, Einstein, Morse, von Neumann, Veblen and Weyl

1.   The following stipends for 1938-9 which were previously recom-
mended stand as accepted:

Prof. Claude Chevalley ------------------- $2,500 (to be notified by Dr. Flexner)
Dr. Paul Erdös ------------------------- 1,500
Prof. Gustav A. Hedlund ($\frac{1}{2}$ salary) ------ 1,750

Re Professor Kurt Reidemeister it was voted to withdraw the recommenda-
tion of November 8, 1937, and to defer making him any offer, because upon speak-
ing with Professor Lefschetz Professor Veblen found that Reidemeister's coming
here next year would not fit in well with Professor Lefschetz's plans.

Mr. Garrett Birkhoff has withdrawn his acceptance of a stipend for
1938-9, on account of his approaching marriage and the resignation of Dr. Ahlfors
from Harvard.

The group recommended that Garrett Birkhoff be now invited to spend the
year 1939-40 at the Institute on the usual participation basis.*

2.   Re Dr. Valentin Bargmann, the group agreed that he appears much
stronger now than he did at first although then esteemed highly, and recommended
that he be given a stipend of $750 for the remainder of 1937-8 if Dr. Flexner
finds this financially possible.

3.   Professor Veblen read a letter from Dr. Flexner explaining the
technical mode of treating unused funds.   The group understands and sympathizes
with the difficulties which the Director encounters.

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* i.e. with the Institute paying half of his salary, and his university paying
   the other half.

4.   Re 1940 International Mathematical Congress.   In connection
with item 3 it was recommended that, if financially possible, the Institute's
obligation of $2500 to the American Mathematical Society be met at the present
time, taking the money from the unused funds originally appropriated for the use
of the mathematicians in 1937-8.

5.   Dr. Kurt Gödel.   Professor von Neumann had seen Gödel in Vienna
last month and reported that he seemed in very good health and had recently ob-
tained certain new results of great interest.   Having in mind the stringency
of the financial situation, the group recommended that Gödel be offered $2500
for one term of 1938-9.   It was the wish of the group to make the offer to
Gödel with the lightest possible conditions of residence in Princeton, under-
standing that he would be free to go to Notre Dame for a part of the term if
suitable arrangements are made by him with Professor Menger.   The group would
prefer to regard this sum not as a stipend, but as salary for a staff appointment.
If additional funds turn out to be available, the group hopes that they can be
used to remove this item of $2500 from the stipend budget of $30,000.   In fact,
the group would prefer an appointment of Gödel on the basis originally proposed,
namely for a term of 3-5 years, at a salary as large as possible,- Professor
Veblen had suggested $4000.   (See Professor Morse's letter of October 4, 1937,
to Dr. Flexner.)

6.   Stipend Scale.   The group agreed that, apart from exceptional
cases, the stipend for married assistants and other temporary members of the
                    for
Institute, and/those who are the sole support of a family, should be raised to
$2000, remaining at $1500 for the others.

7.   Renewal of stipends was recommended as follows:

Dr. Anthony P. Morse -- $2,000
Prof. Tadasi Nakayama -- 1,500
Dr. Malcolm F. Smiley -- 1,500

notification to be made by the Director at once.

8.   It was agreed that the following three professors should be in-

vited to spend the year 1938-9 at the Institute on the usual participation basis:

Professor Haskell B. Curry, Pennsylvania State College --------------- $1,262.50**
Professor Burton W. Jones, Cornell University ----------------------- 1,800.00 ?
Professor Isidor I. Rabi, Physics, Columbia University --------------- 3,500.00 ?

and that the following stipends should be offered:

Dr. Valentin Bargmann -- $1,500
Dr. Walter H. Barkas --- 2,000
Dr. Dorothy Manning -- 1,500

It was agreed that Professor von Neumann should carry on preliminary correspondence

with Rabi, and Professor Morse with Curry and Jones.

9.   Re applicant Donald T. Perkins, Professor Veblen agreed to write Ore.

10.   It was decided to decline applications from the following:

Prof. Achille Bassi   Dick W. Hall
Prof. Clyde B. Crawley   Rolf Landshoff
George Devereux   Morris E. Rose
Melvin J. Dresher

11.   The following candidates remain for future consideration:

Prof. A. Adrian Albert   Prof. L. J. Mordell
Prof. Eduard Čech   Dr. E. L. Post
Dr. Samuel Eilenberg   Dr. Th. Schneider
Prof. William Flexner   Dr. Eduard Teller
Dr. Gerhard Gentzen   Prof. Tracy Y. Thomas
Mr. Philip Hall of Kings College, Cambridge Prof. G. Vranceanu

and the following applicants:

Leonidas Alaoglu   Donna Price (application for admission only)
Josephine H. Chanler   Hyman Serbin, whose qualifications will be
Leon W. Cohen   Max Shiffman   /specially investigated
Stanislaw Golab   Willem J. van Stockum/before next meeting
Donald T. Perkins   Alvin Sugar
Sam Perlis   Charles C. Torrance
Billy J. Pettis   A. Walfish

** This amount (half salary) agreed to from the Institute regardless of State
   College contribution.

12. The following statement of the stipend fund for next year

results from the actions at this meeting:

Stipend appropriation for 1938-9 -------------------------------- $30,000

Dr. Kurt Gödel, unless later transferred
    to another account (1 term) ----------- $2,500.00   *Accept*

Dr. Valentin Bargmann --------------------- 1,500.00
Dr. Walter H. Barkas ---------------------- 2,000.00   *Accept - 1800*
Prof. Claude Chevalley -------------------- 2,500.00
Prof. Haskell B. Curry -------------------- 1,262.50
Dr. Paul Erdös ---------------------------- 1,500.00
Prof. Gustav A. Hedlund ------------------- 1,750.00
Prof. Burton W. Jones, ½ salary ----------------------- $1,800 ? *Accept - 1750*
Dr. Dorothy Manning ----------------------- 1,500.00   *acc.*
Dr. Anthony P. Morse ---------------------- 2,000.00   *acc. 1800*
Prof. Tadasi Nakayama --------------------- 1,500.00   *acc.*
Prof. Isidor I. Rabi, ½ salary ----------------------- 3,500.? *Accept - 1,750?*
Dr. Malcolm F. Smiley --------------------- 1,500.00   *acc.*

                              $19,512.50 +$5,300 ?

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
March 16, 1938

Present: Professors Alexander, Morse, von Neumann, Veblen and Weyl

1.   It was voted to send declinations to the following candidates
for stipends: Leonidas Alaoglu, Josephine H. Chanler, Leon W. Cohen, Stanis-
law Golab (Veblen will write), Willem J. van Stockum (Weyl will write), Alvin
Sugar, Charles C. Torrance (von Neumann will write), A. Walfish (Weyl will
write), Katharine Way.

2.   The group voted to hold the following names for further con-
sideration:

> Donald T. Perkins (application subsequently withdrawn)
> Sam Perlis
> Billy J. Pettis
> Max Shiffman

3.   Von Neumann reported that Rabi had accepted the appointment
for the second term of 1938-9.   This leaves approximately $1500 available.
The group accordingly voted that when we know the exact amount of Professor
Rabi's salary, of which 1/4 will be necessary as his stipend,

4.   We shall recommend a grant to Dr. Hyman Serbin to equal the
balance of $30,000 still available, or $1500, whichever is smaller.   *$1387.50*

guaranteed by Mrs. Bliss T$ 1500-   accepted
10/7/38

5.   The group understands that we are informally committed to
Garrett Birkhoff and Henry Whitehead for the year 1939-40.

6.   Professor Morse was requested to act as Secretary for one more
year, filling out a two-year term in accordance with the precedent set by
Professor von Neumann.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
November 5, 1938

Present: Professors Alexander, Einstein, Veblen, Weyl, and Morse (Secretary)

1.   The group believes it desirable that Professor William W.
Flexner of Cornell University spend a year at the Institute, and authorizes
Professor Veblen to cooperate with Dr. Abraham Flexner in making arrangements
for such a year.

2.   The group recommends that a stipend of $4000 be granted to
Dr. Gödel for the academic year 1939-40.   It is desirable that the question
of Dr. Gödel's stipend be settled as soon as possible in order that he may
feel more at ease and more secure in regard to his immediate future.   It is
the wish of the group that Gödel be subjected to the lightest possible condi-
tions of residence in Princeton, understanding that, as is the case this year,
he would be free to go to Notre Dame for a part of a term if suitable arrange-
ments are made by him with Professor Menger.   See Morse's letter of October 4,
1937, to Dr. Flexner.

The commitment (conditioned on suitable funds being available) to
Garrett Birkhoff for another year was recalled, and the case of Henry Whitehead
was discussed.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
November 22, 1938

Present: Alexander, Einstein, Weyl, and Veblen (Secretary pro tem.)
          (Having previously spoken with Morse, who was kept away by illness,
          Veblen was able to report his views on the various subjects under
          discussion.)

1.   Einstein brought up the case of Dr. Eugen Lukacs, whose wife
is already in this country, having been able to come with an Austrian pass-
port.   Her husband, who is a Hungarian citizen, was not able to get a pass-
port because the quota was full.   The consul is favorable to giving a pass-
port and could do so if he had something which would seem at all official to
justify it.   Dr. Lukacs, according to Mayer, has written a good doctor's
thesis and would presumably be admitted to the Institute as a temporary mem-
ber if the case had come up under normal circumstances.   Einstein suggested
the following procedure: Dr. Lukacs's wife will suggest to him that he
should apply for admission to the Institute.   In response he will receive a
formal letter of the usual sort saying that he is admitted as a temporary
member.   He will use this in the attempt to obtain a visa.   It will be
clearly understood that the Institute assumes no financial responsibility of
any sort; but it is understood that he has relatives who have a certain
amount of money.   Einstein thought that this procedure might be one which
could be used to help in a number of cases of scientists of less distinc-
tion than those who are financially helped by the Institute.

2.   Weyl reported about the case of Alfred Brauer.   A sum of
$750 has been raised from sources outside the Institute, which will be used
to offer him a position as assistant to Alexander for the second term, and

Brauer will be invited on this basis.   It is understood in this case also that no financial responsibility has been assumed by the Institute.   This action was confirmed.

3.   Veblen reported about a letter which he had received from Levi-Civita about Professor Guido Fubini, whom Levi-Civita characterizes as the leading analyst after Volterra.   It was generally agreed that Fubini is a mathematician of high distinction and that it would be most desirable to carry out Levi-Civita's suggestion, namely to invite him to the Institute for the second term of the present year with a small stipend of, say, $500 or $750.   Fubini is at present in Paris with his wife and two sons.   He is about fifty-nine years old.   It was agreed that the above action should be recommended to Dr. Flexner.

4.   There was a general discussion of the possibility of help from the Institute for a few of the most distinguished scholars who are older than those who have heretofore been received in this country, placing them on the basis of Visiting Professor at relatively small salaries.   The names of Levi-Civita, Schur and Fubini were mentioned in this connection.

5.   Veblen reported a letter from Garrett Birkhoff suggesting that he would like to come to the Institute in the second half of 1939-40.   It was agreed that a stipend should be recommended on the usual fifty-fifty terms, subject of course to the necessary funds being appropriated.

6.   Veblen also reported an application for a stipend for the year 1939-40 from Paul A. Smith.   It was voted to recommend this stipend on the usual fifty-fifty terms, subject to the necessary funds being appropriated.

7.   Veblen reported on the problem which has been posed by the resignation of Neugebauer and some of his associate editors from the Zentralblatt on account of undue interference with its policies by the German publishers.   There was general agreement that a mathematical abstract journal ought to be started in the United States, with Neugebauer as editor.

8.   Veblen reported from Miss Blake that her $1000 fund for technical assistance, which should be used primarily for typing etc., has suffered the following drafts:

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Prof. Albert, honorarium --- $ 50
Annals Assistant ------------  400
Prof. Denjoy, honorarium ---   50
Prof. Dehn, honorarium -----   50
                             -----
                             $550
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THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
November 29, 1938

Present: Professors Alexander, Einstein, Veblen, Weyl, and Morse (Secretary)

1. Professor Lefschetz suggested to Professor Alexander that the
University and the Institute cooperate in bringing Professor Čech here next
year. It was agreed to discuss this matter again at the January meeting.

2. In connection with the fifty-fifty stipend agreed upon at the
November 22 meeting, contingent upon stipend funds being available, Garrett
Birkhoff writes that his salary for 1939-40 will be $4,300. He has applied
for a stipend for the second term of that year.

3. In connection with the fifty-fifty stipend agreed upon at the
November 22 meeting, contingent upon stipend funds being available, Professor
Paul A. Smith writes that his salary at present is $4,500, and that it may be
raised to $5,000.

4. In accordance with a letter from Dr. Flexner to Professor Veb-
len it was agreed that Professor Einstein could proceed with the matter of
Lukacs as proposed in the minutes of the meeting of November 22.

5. The cases of Professors E. Hellinger (Care Dr. Hanna Hellinger
[sister], 6617 South Racine Avenue, Chicago), and Hans Hamburger (Eisenzahn-
strasse 6, Berlin-Halensee, Germany) were brought up by Professor Weyl, and
after the meeting also the case of Professor Artur Rosenthal (Blumenthalstr.
7, Heidelberg, Germany). Hellinger and Rosenthal are in concentration camps,
and Hamburger has recently sent an urgent cable to Professor Weyl asking for
immediate assistance for himself. One can reach Professor Hellinger through
his sister, as above. It was suggested that Dr. Flexner invite these men
to become members of the Institute for the second term of this year. These

invitations should be of the usual formal type.   It is hoped that these in-
vitations will be instrumental in inducing the Consul to grant the necessary
visas.

6.   Professor Hassler Whitney has written that he would like to
visit the Institute for a week or two during the second term of this year,
provided some small allowance could be made for his expenses.   It is hoped
that money may be available from some contingent fund to provide $50 for
Whitney for a lecture or series of lectures.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
January 24, 1939

Present: Profs. Alexander, Einstein, von Neumann, Veblen, Weyl, and Morse (Secretary)

1.   The vote at meetings of November 22 and 29, 1938, to recommend
the grant of stipends to Professors Garrett Birkhoff and Paul A. Smith was re-
called.

2.   We renew our recommendation, already tentatively accepted by
Dr. Flexner, that Dr. Kurt Gödel receive a salary for next year of $4,000.
(See Minutes of November 5, 1938, Morse letter to Dr. Flexner November 9 and
Dr. Flexner's reply November 12, 1938.)

3.   It was voted to recommend the reappointment of Dr. Valentin
Bargmann, renewing his stipend of $1,500.

4.   It was agreed that Professor Veblen would talk with Drs. Hyman
Serbin and Walter H. Barkas with regard to their wishes for another year, and
that Professor Weyl would talk with Drs. Paul Erdös and Dorothy Manning.   In
the cases of Serbin and Erdös the feeling was that unless exceptional reasons
developed, it would be well that they resume their work elsewhere.

5.   The refugee question was discussed at some length, with an under-
standing that it will be taken up again at the next meeting.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 3, 1939

Present: Profs. Alexander, Einstein, Morse, Weyl, and von Neumann and
          Veblen (Secretaries)

Professor Veblen reported a letter from Dr. Flexner dated January 30,
requesting that we should

"discuss the way in which it [the mathematical group] can keep up its
active relationship with the Princeton mathematical group after Fuld
Hall is ready for occupation. When you come to a conclusion I shall
be happy to talk with any one or more of you who may be charged with
explaining your ideas."

A general discussion was held, and the following points were unanimously agreed to:

1.   It was understood that substantially the amount of space for
the School of Mathematics which was specified when the plans were originally
outlined for Fuld Hall has been incorporated in the final plans.   This includes a large room for each of the six professors with an adjacent room for
his assistant, a room for the Associate, two rooms for secretarial and publication purposes, and a number of additional rooms which can be used for temporary members.

2.   It was voted to request that definite rooms be now assigned
individually to members of the permanent staff.

3.   It was understood that our general policy will be to hold
mathematical lectures and seminars in Fine Hall, and that we desire that
facilities in Fine Hall be provided so that we can continue without interruption our present relations with students and faculty of the University.

4.   In order to carry out this program of cooperation with the University, and also to cooperate in many informal ways which cannot be enumerated in advance, it is requested that a sufficient number of suitable rooms in Fine Hall be assigned to the School of Mathematics of the Institute.   It is desired that each professor may if he wishes spend a part of each day in consultation with students and professors of the University.   It is thought most practical that the assignment of rooms should be to the School of Mathematics as a whole rather than to individuals.   There should be sufficient room so that the professors will not interfere with each other, and moreover there should be the possibility of holding small seminars or lectures without interfering with the other uses of Fine Hall.

5.   It is presumably best to leave it to the Mathematics Department of the University to say how much of the space in Fine Hall can be allotted to the Institute.   At present the Institute is occupying three large and six smaller rooms, and sharing in the use of the Professors' Room as well as the other common rooms.

6.   It is a fact that although the Physics Department of the University has no control over Fine Hall, it has a vital interest in the arrangements that are being made.   Therefore it might well be consulted.

Professors Veblen and von Neumann were appointed as a committee to draw up the conclusions of the meeting and to confer with Dr. Flexner.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 23, 1939

Present: Profs. Alexander, Einstein, von Neumann, Veblen, Weyl and Morse (Secretary)

The following recommendations of stipends for 1939-40 were voted:

1. To Professor Stephen C. Kleene, University of Wisconsin, $1250,
being half of his salary of $2500.

2. To Professor Henry Margenau (mathematical physicist), Yale University, $800 for the first term. Margenau's salary is $4500. He has a
leave of absence for the first half-year, and asked for a grant of $800 or $900.

3. To Dr. Walter H. Barkas, $1800, renewal of his present stipend.

From the stipend fund of $17,500 thus far appropriated to the School
of Mathematics for the year 1939-40, the following allocations have now been
made:

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Valentin Bargmann ---------- $1,500 (Accepted)
Walter H. Barkas -----------  1,800
Garrett Birkhoff (2d term)-  1,075 (Accepted)
Kurt Gödel -----------------  4,000 (Accepted)
Stephen C. Kleene ----------  1,250
Henry Margenau (1st term) -    800
Paul A. Smith --- $2,250 or  2,500 (Accepted)
                            $12,925
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THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held March 6, 1939

Present: Profs. Alexander, Einstein, von Neumann, Veblen, Weyl, and Morse (Secretary)

1.   It was voted to recommend that a stipend of $500 be offered to Professor H. Lyle Smith of Louisiana State University, with the understanding that he would spend his sabbatical year at Princeton.

2.   It was voted that arrangements with regard to Professor Joseph E. Mayer of Johns Hopkins would be left with Professors Veblen and von Neumann, negotiations to be on the basis of a maximum expenditure by the Institute of $1500, and to be undertaken both with Princeton University and with Johns Hopkins University.

3.   Professor von Neumann was asked to explore the possibility of obtaining a grant from the Rockefeller Foundation for Shizuo Kakutani.

4.   Professor Morse was asked to present the names of the following six candidates to Dr. Flexner as especially recommended by the group, giving a brief account of each of the candidates: Warren Ambrose, Dorothy Manning, Sam Perlis, Ralph S. Phillips, Max Shiffman, and Robert M. Thrall.

5.   The following candidates were considered noteworthy: Professor Paul Bernays, and Drs. Paul Erdős, Mark Kac, Alfred Tarski, and Herbert S. Zuckerman; and in mathematical physics, Mr. Robert E. Marshak and Miss Elizabeth Monroe.

6.   Acceptances have now been received of all the stipends previously offered for 1939-40.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
April 19, 1939

Present: Profs. Alexander, Einstein, von Neumann, Veblen, Weyl and Morse (Secretary)

1. The case of Dr. Herbert S. Zuckerman was brought up. On
March 21 it was informally voted by the group to recommend a stipend of $1500
for Zuckerman. Zuckerman has since inquired concerning possibility of a
change in conditions. Morse agreed to write Zuckerman [see letter of April
19, 1939]. If Zuckerman wishes, the group is willing to recommend that he
receive a stipend of $750 for the second term of 1939-40; it was understood
that we would recommend a reappointment for Zuckerman for the first half of
1940-41 if he so wishes.

2. It was voted to recommend that a stipend be granted to
Dr. Antonio I. Flores for 1939-40 provided Dr. Flexner finds that money is
available. Professor von Neumann agreed to discuss this matter with Dr.
Flexner; and at the same time to ask him if there is a possibility of addi-
tional funds for stipends becoming available.

3. Professors Morse and von Neumann were requested to revise the
list of preferred applicants, and to send declinations to applicants not on
this preferred list.

4. In case Zuckerman accepts the stipend of $750 for a half year,
power to recommend the use of the remaining $750 was left with Morse and
von Neumann.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
September 21, 1939

Present: Profs. Einstein, von Neumann, Veblen, Weyl and Alexander (Secretary)

1.   It was voted that the stipend granted to H. Lyle Smith be allowed to stand although H.L. Smith would be in Princeton for one term only.

2.   Professor von Neumann was authorized to consult with Dr. Flexner about getting the aid of the State Department to facilitate Dr. Gödel's return to the United States.

3.   A letter from Marshall Stone recommending that we grant a stipend to Dr. Alfred Tarski was discussed, but no action was taken as funds were not available.

4.   Professor Alexander was authorized to negotiate with Dean Eisenhart about keys and telephones for the rooms in Fine Hall assigned to the Institute; also about the payment of the janitor for work in connection with the Tea Club.

5.   It was voted that the Institute rooms in Fine Hall would not be definitely assigned to any particular members of the Department, but that, as far as possible (barring conflicts etc.) Professors Morse and Veblen should work in Room 108, Professors Einstein and Alexander in Room 109, and Professors Weyl and von Neumann in Room 111.   Room 110 was reserved for general use.

6.   Professor Veblen was authorized to negotiate about bus service between Fine and Fuld Halls, and to take up with the Grounds and Buildings Committee the matter of footpaths to Fuld Hall.

7.   The Library Committee of the School of Mathematics was authorized
to look up its old report to Dr. Flexner about an appropriation for a mathe-
matics library, and to draw up a formal request to the Trustees that the re-
port be acted on.   The Committee was urged to take action as early as possible
in view of the meeting of the Trustees on October 9th.

8.   It was voted that the room adjacent to the Library reading
room in Fuld Hall, No. 228 (originally intended as a talking room, but re-
cently assigned to Dr. Mayer) was urgently needed as a talking room.   Pro-
fessor Veblen was authorized to negotiate the matter of having Dr. Mayer
transferred to another study.

9.   It was voted that the matter of giving an honorarium to Mr.
Hahr for his help during the removal of Institute property from Fine Hall be
left to Miss Blake.

10.   It was decided to appoint Dr. Brauer as a representative of
the Institute to look after mimeographed notes, books belonging to the
School of Mathematics, etc.

JAMES W. ALEXANDER

P.S.   During the summer Dr. Warren Ambrose was offered and
has accepted a stipend of $1,500 for the year 1939-40, leaving a balance
of $75 in the stipend fund.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
November 10, 1939

Present: Profs. Einstein, Morse, von Neumann, Veblen, Weyl, and Alexander (Secretary)

1.   It was voted that Professor Fubini be awarded a stipend of $1,500
for the year 1940-41, with the understanding that the necessary funds were to be
furnished by special provision from an outside source.

2.   It was voted that Dr. Alberto González Domínguez of Buenos Aires
be recommended for admission to the Institute if, and when, he should apply.

3.   It was voted that Dr. Kurt Gödel be recommended for reappoint-
ment for another year, and that Dr. Aydelotte be requested to urge the State
Department to issue him a passport visa.

4.   The cases of André Weil and Jesse Douglas were discussed without
any formal motion being taken.   There was also a discussion about the proposed
Mathematics Library.   It was again estimated that a satisfactory library could
probably be purchased for $40,000, though more would be required if the field of
physics were also to be covered.

5.   Professor Veblen reported that the mathematical budget for the
past five years had been as follows:
For the year ending

$$
\begin{array}{lll}
\text{June 1936} & \text{---} & \$146,479. \\
\text{June 1937} & \text{---} & 147,129. \\
\text{June 1938} & \text{---} & 143,159. \\
\text{June 1939} & \text{---} & 145,459. \\
\text{June 1940} & \text{---} & 129,780.
\end{array}
$$

J. W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
December 6, 1939

Present: Profs. Einstein, Morse, v.Neumann, Veblen, Weyl, and Alexander (Secretary)

1.   It was voted that the Secretary send notices to Science and to
the Bulletin of the American Mathematical Society announcing that applications
for stipends for the year 1940-41 should be filed by February 15th, 1940.

2.   In view of the enforced absence of Dr. Gödel, it was recom-
mended that we divert a sum of $1,500 from the funds reserved for Dr. Gödel,
this sum to be used in assisting Drs. Erdös and Halmos.   Professor Veblen
was delegated to negotiate with Dr. Aydelotte about the matter.   Decision
was postponed on the exact division of the funds between the two recipients.

3.   It was voted that -- subject to Dr. Aydelotte's approval --
we should approach Professors Oppenheimer and Albert on the question of their
coming to the Institute as visitors during the year 1940-41.   Professor
von Neumann was delegated to write to Professor Oppenheimer, and Professor
Veblen to Professor Albert.

J. W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
January 25, 1940

Present: Profs. Einstein, Morse, v.Neumann, Veblen, Weyl, and Alexander (Secretary)

  1. Professor Veblen made the following report on the actions taken

by the Board of Trustees at their January meeting:

(a) The following stipends were granted by the Board for the second term of
  the academic year 1939-40:

       To Dr. Gödel ----- $2,000.
       To Dr. Erdös ------ 750.
       To Dr. Halmos ---- 750.

(b) An appropriation of $15,000 was placed at the disposal of the School of
  Mathematics as a stipend fund for the year 1940-41, with the under-
  standing that the amount would be increased if more money were to be-
  come available later. (Dr. Gödel's stipend for 1940-41 was to be in-
  cluded among the items covered by the appropriation.)

(c) The Trustees reported a gift of $100,000 (in installments of $25,000 over
  a period of four years) for the purchase of books for the Fuld Hall
  Library.

  2. In connection with 1(c), Professors von Neumann and Weyl were

appointed as a committee to look after the purchase of mathematical books for

the library, to try to get duplicate copies of periodicals, when possible

through Annals exchange, to discuss with Dr. Aydelotte the situation with ref-

erence to mathematical books, etc.

  3. It was decided to take up informally with Dr. Aydelotte the

matter of reversing the present regulation relative to the disposal of money

returned when a stipendee does not avail himself of his stipend. As matters

now stand the money reverts automatically to the general fund and cannot be

used by the individual School, even though there may be worthy candidates for

whom no provision has been made.

  4. In view of a communication from Professor Albert with reference

to his proposed visit in 1940-41, it was voted to offer him a stipend equal to

half his present salary, plus an additional $300 towards unusual expenses.

5. Professor von Neumann reported he had received word from Professor Oppenheimer that the latter would like to come to the Institute in 1940-41 as a visiting member provided he could make the necessary arrangements with his home authorities, but that he would not be able to give a definite answer until after February 1.

6. Professor von Neumann reported that he was ready to take Dr. Kakutani as assistant in 1940-41, but that it might be well to grant the latter a stipend if any were available.

7. Professor Morse was authorized to offer Dr. Ambrose an extension of the latter's stipend for another year if, between the two, they decided the extension was desirable.

<div style="text-align:right">J. W. ALEXANDER
Secretary</div>

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 9, 1940

Present: Profs. Einstein, von Neumann, Veblen, Weyl, and Morse (Acting Secretary)

     1.   It was reported that Professor A. A. Albert had declined the
invitation to come to the Institute for next year.

     2.   It was voted to recommend a renewal of the $1500 stipend of
Dr. Warren Ambrose; to recommend a stipend of $1500 to Dr. Shizuo Kakutani,
and a stipend to Professor Waldemar J. Trjitzinsky on the usual 50-50 basis.

     3.   It was voted to authorize Professors Veblen and von Neumann to
seek arrangements with the University of Washington whereby Professor A. H.
Taub would spend the year 1940-41 at the Institute without stipend, his place
at the University of Washington to be filled by Dr. Ralph S. Phillips with a
stipend of $1500 from the Institute.

     4.   The commitments for the year 1940-41 are then as follows:

Dr. Warren Ambrose ------	$ 1,500	Final
Dr. Kurt Gödel ----------	4,000	
Dr. Shizuo Kakutani ----	1,500	Final
Prof. J.R.Oppenheimer --	3,500	Estimated
Dr. Ralph S. Phillips --	1,500	
Prof. W.J.Trjitzinsky --	2,500	Estimated, Final

Estimated balance unallocated $14,500

Estimated balance unallocated   500

Stipend Fund 1940-41 -------- $15,000

     5.   The votes concerning Ambrose, Kakutani and Trjitzinsky will
be reported to the Director.

MARSTON MORSE

Acting Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held March 15, 1940

Present: Dr. Aydelotte, and Professors Einstein, Morse, von Neumann, Veblen, Weyl,
and Alexander (Secretary)

1. The following provisional classification of future candidates

for stipends was adopted:

Senior Mathematicians
1. Orrin Frink, Jr.; 2. Saunders MacLane; 3. Paul Erdős; 4. Antonio I. Flores;
5. Hidegorô Nakano; (Kurt Mahler, Beniamino Segre, Stanislaw M. Ulam)

Senior Physicists
1-2. Felix Bloch and Edward Teller; (James H. Bartlett, Jr., David G. Bourgin)

Junior Mathematicians
1. Seymour Sherman; 2. Elliott W. Montroll; 3. Robert M. Thrall;
4. Albert L. Whiteman; 5. Irving E. Segal; 6. George B. Thomas, Jr.;
(Donald T. Perkins, Sam Perlis, Leonard Tornheim)

Junior Physicists
1. Charles L. Critchfield; 2. Robert E. Marshak; 3-4. Emil J. Hellund and
Earl A. Schuchard; 5. Aaron Sayvetz

2. A tentative draft of the announcement of the School of Mathematics,

prepared for the Bulletin of the Institute, was submitted to Dr. Aydelotte for

his consideration.

3. It was voted, with Dr. Aydelotte's approval, to guarantee Dr.

Halmos either an assistantship (to von Neumann) or a stipend, of $1500, for

the year 1940-41.

4. It was agreed that Professor Morse should write a personal

letter to Dr. Flores inquiring about the latter's future plans. (When Dr.

Flores left Princeton to fight in the Spanish civil war, there was some

sort of an understanding between him and Dr. Flexner that means to finance

his return to Princeton would be found if he desired it.)

5.   It was suggested that Dr. Aydelotte approach one or more of
the Foundations for funds to bring Professor Niels Bohr to the Institute for
the duration of the war.   The question of forming an enlarged center for
mathematical physics was also discussed.

J. W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held April 5, 1940

Present: Dr. Aydelotte, and Professors Einstein, Morse, von Neumann, Veblen, Weyl,
and Alexander (Secretary)

1.   Dr. Aydelotte reported that, contrary to what had previously
been hoped, it would be impossible to increase the budget of the School of
Mathematics for the year 1940-41.

2.   It was voted to recommend that the honorarium granted to Pro-
fessor Carl L. Siegel for the balance of the present academic year be raised
to a total of $1000, this sum to include the $500 already wired to him.
(There remains an unused balance in the Assistants' Fund from which the above
can be paid.)

3.   It was recommended that the Department of Mathematics of Prince-
ton University be guaranteed an annual courtesy contribution of $2000 a year
(reducing the present contribution by $1000 a year) for the next five years,
in exchange for facilities in Fine Hall.   It was recommended that hereafter
the Institute request the use of three rooms (in place of four) and one tele-
phone.

4.   It was voted to recommend a stipend of $1500 to Mr. Seymour
Sherman, $1000 of which will be available from the amount previously budgeted
in connection with Fine Hall.

5.   In response to an informal request from the Department of Math-
ematics of the University that the Institute collaborate in making a grant to
Professor William T. Martin, it was voted, with Dr. Aydelotte's approval, that
at the discretion of our negotiating committee, we be prepared to make a con-

tribution up to $400.

    6.   The following allocations have been made for 1940-41:

Warren Ambrose	$1,500
Kurt Gödel	4,000
Shizuo Kakutani	1,500
Ralph S. Phillips	By exchange with Taub at Univ. /of Washington
Seymour Sherman	1,500
Carl L. Siegel	3,000
Abe H. Taub	1,800
W.J.Trjitzinsky	2,500
	$15,800
W.T.Martin	400 ?
	$16,200 ?

Thrall may 9 - 1800

J. W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
       May 9, 1940

Present: Dr. Aydelotte, and Professors Morse, Weyl, and Veblen (Secretary)

1.   A discussion was held about the policy to be followed in the
case of men like Peter G. Bergmann and Walter H. Barkas who have been at-
tached to the Institute as long as is desirable in their interest, but who
have not yet found suitable academic positions.

In the case of Barkas it was agreed that he should be offered a
stipend of $1800 for the year 1940-41 provided the Physics Department of
Princeton University will contribute one-half of this amount.

It was decided to take no immediate action about Dr. Bergmann,
but to leave the matter in the hands of Dr. Aydelotte.

2.   It was agreed to offer a stipend of $1800 to Dr. Robert M.
Thrall of the University of Michigan, in case Dr. Aydelotte finds this to
be financially possible.   It is hoped that it will be possible to act on
this recommendation next week.

Weyl had gone carefully into the comparative merits of Thrall
and Montroll, and decided that Montroll's claims were not as good as they
had been thought to be at a previous meeting where Montroll was given pre-
ferred position.   Weyl has left a memorandum on the subject in the Montroll
file.

3.   The entire list of stipend candidates for the year 1940-41,
to date is as follows:

Warren Ambrose, 1914, Ph.D./39 Illinois; I.A.S. stipend renewed
Isaac A. Barnett, 1894, Ph.D./18 Chicago, Asso.Prof. Cincinnati
James H. Bartlett, Jr., 1904, Ph.D./30 Harvard, Asso.Prof.Illinois
Felix Bloch, 1905, Ph.D./28 Leipzig, Prof.Physics Stanford
David G. Bourgin, 1900, Ph.D./26 Harvard, Asst.Prof. Illinois
Charles L. Critchfield, 1910, Ph.D./39 G.Washington Univ., Instr.Optics,U.Rochester
Mahlon M. Day, 1913, Ph.D./39 Brown
William D. Duthie, 1912, Ph.D./40? Princeton
Ugo Fano, 1912, Dr.Math./34 Turin
Orrin Frink, Jr., 1901, Ph.D./26 Columbia, Prof.Penn.State Col.
Abe Gelbart, 1911, Ph.D./40? M.I.T.
Kurt Gödel, 1906, Ph.D./30 Vienna; I.A.S. stipend granted
Paul R. Halmos, 1914, Ph.D./38 Illinois; I.A.S. assistantship (to von Neumann)
Emil J. Hellund, 1911, Ph.D./39 Univ. of Washington
Stephen A. Jennings, 1915, Ph.D./39 Toronto, Instr. Yale
Shizuo Kakutani, 1911, Rigakushi/34 Tohoku, Instr.(Prof.?) Osaka; I.A.S. stipend
Ellis R. Kolchin, Ph.D./40 Columbia
Saunders MacLane, 1909, Ph.D./34 Göttingen, Asst.Prof. Harvard
Kurt Mahler, 1903, Ph.D./27 Frankfurt a/M., temporary Asst.Lecturer Manchester(?)
Robert E. Marshak. Ph.D./39 Cornell, Rochester Physics Dept.
Dr. M. Mathisson, Cambridge, Eng.
Elliott W. Montroll, 1916, Ph.D./40 Pittsburgh
Hidegoro Nakano, 1909, "Rigakuhakusi"/36 Tokyo, Research Asst. Tokyo Univ.
Myron H. Nichols, 1915, Ph.D./39 M.I.T.
J. Robert Oppenheimer, 1904, Ph.D./27 Göttingen, Prof. Cal.Tech.
Donald T. Perkins, 1914, Ph.D./38 Yale, Benj.Peirce Instr.Harvard /38-40
Sam Perlis, 1913, Ph.D./38 Chicago
Ralph S. Phillips, 1913, Ph.D./39 Michigan.
Dr. Gunnar Randers, 1915, from Oslo Inst. of Theoretical Astrophysics, on fellow-
        ship at Mt. Wilson Observatory 1939-40
Alfred Romer, 1906, Ph.D./35 Cal.Tech., Prof. Physics Whittier Col.
Aaron Sayvetz, 1917, Ph.D./39 Chicago, Teaching asst. Chicago 1938-
Earl A. Schuchard, 1913, Ph.D./40? Univ. of Washington
Irving E. Segal, 1918, Ph.D./40? Yale
Beniamino Segre, 1903, Dr.Math./23 Turin, now in Cambridge, Eng.
Seymour Sherman, 1917, Ph.D./40? Cornell; I.A.S. stipend granted
Carl L. Siegel, 1896, Dr.Phil./20 Göttingen, Prof. Göttingen; I.A.S. stipend granted
Alfred   Warsaw(?)
Abe H.   gton; I.A.S. stipend
George
Robert   May 20/40   See 2 above
Leonar   . Col., Chicago
Waldem   llinois; I.A.S.stipend
Philip   From additional funds:
Albert   1938-40
Alexander   Dr. Walter H. Barkas ----------------- $ 900.00   m Warsaw
Max Wy   Princeton Univ. to appoint him also
John V   a research associate at $900 or $1000

                  Dr. Robert M. Thrall ------------------- 1,800.00

                                                               N

                                                     y pro tem.

Warren Ambrose, 1914, Ph.D./39 Illinois; I.A.S. stipend renewed
Isaac A. Barnett, 1894, Ph.D./18 Chicago, Asso.Prof. Cincinnati
James H. Bartlett, Jr., 1904, Ph.D./30 Harvard, Asso.Prof.Illinois
Felix Bloch, 1905, Ph.D./28 Leipzig, Prof.Physics Stanford
David G. Bourgin, 1900, Ph.D./26 Harvard, Asst.Prof. Illinois
Charles L. Critchfield, 1910, Ph.D./39 G.Washington Univ., Instr.Optics,U.Rochester
Mahlon M. Day, 1913, Ph.D./39 Brown
William D. Duthie, 1912, Ph.D./40? Princeton
Ugo Fano, 1912, Dr.Math./34 Turin
Orrin Frink, Jr., 1901, Ph.D./26 Columbia, Prof.Penn.State Col.
Abe Gelbart, 1911, Ph.D./40? M.I.T.
Kurt Gödel, 1906, Ph.D./30 Vienna; I.A.S. stipend granted
Paul R. Halmos, 1914, Ph.D./38 Illinois; I.A.S. assistantship (to von Neumann)
Emil J. Hellund, 1911, Ph.D./39 Univ. of Washington
Stephen A. Jennings, 1915, Ph.D./39 Toronto, Instr. Yale
Shizuo Kakutani, 1911, Rigakushi/34 Tohoku, Instr.(Prof.?) Osaka; I.A.S. stipend
Ellis R. Kolchin, Ph.D./40 Columbia
Saunders MacLane, 1909, Ph.D./34 Göttingen, Asst.Prof. Harvard
Kurt Mahler, 1903, Ph.D./27 Frankfurt a/M., temporary Asst.Lecturer Manchester(?)
Robert E. Marshak. Ph.D./39 Cornell, Rochester Physics Dept.
Dr. M. Mathisson, Cambridge, Eng.
Elliott W. Montroll, 1916, Ph.D./40 Pittsburgh
Hidegoro Nakano, 1909, "Rigakuhakusi"/36 Tokyo, Research Asst. Tokyo Univ.
Myron H. Nichols, 1915, Ph.D./39 M.I.T.
J. Robert Oppenheimer, 1904, Ph.D./27 Göttingen, Prof. Cal.Tech.
Donald T. Perkins, 1914, Ph.D./38 Yale, Benj.Peirce Instr.Harvard /38-40
Sam Perlis, 1913, Ph.D./38 Chicago
Ralph S. Phillips, 1913, Ph.D./39 Michigan.
Dr. Gunnar Randers, 1915, from Oslo Inst. of Theoretical Astrophysics, on fellow-
    ship at Mt. Wilson Observatory 1939-40
Alfred Romer, 1906, Ph.D./35 Cal.Tech., Prof. Physics Whittier Col.
Aaron Sayvetz, 1917, Ph.D./39 Chicago, Teaching asst. Chicago 1938-
Earl A. Schuchard, 1913, Ph.D./40? Univ. of Washington
Irving E. Segal, 1918, Ph.D./40? Yale
Beniamino Segre, 1903, Dr.Math./23 Turin, now in Cambridge, Eng.
Seymour Sherman, 1917, Ph.D./40? Cornell; I.A.S. stipend granted
Carl L. Siegel, 1896, Dr.Phil./20 Göttingen, Prof. Göttingen; I.A.S. stipend granted
Alfred Tarski, age "in the late thirties", Ph.D. "early 20's(?) Warsaw(?)"
Abe H. Taub, 1911, Ph.D./35 Princeton, Asst.Prof. Univ. of Washington; I.A.S. stipend
George B. Thomas, Jr., 1914, Ph.D./40? Cornell
Robert M. Thrall, 1914, Ph.D./37 Illinois, Instructor Michigan; See 2 above
Leonard Tornheim, 1915, Ph.D./38 Chicago, teaching Austin Evg. Jr. Col., Chicago
Waldemar J. Trjitzinsky, 1901, Ph.D./26 California, Asso.Prof. Illinois; I.A.S.stipend
Philip R. Wallace, 1915, Ph.D./40? Toronto
Albert L. Whiteman, 1915, Ph.D./40 Pennsylvania, Asst.Instr.Penn. 1938-40
Alexander Wundheiler (publications apparently began in 1929), from Warsaw
Max Wyman, 1916, Ph.D./40? Cal.Tech.
John V. Wehausen, Ph.D./ Michigan, Instr. Columbia 1938-40
                                        OSWALD VEBLEN

                              Secretary pro tem.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
        September 18, 1940

Present: Profs. Einstein, Morse, Veblen, von Neumann, Weyl, and Alexander (Secy.)

1.   Rooms to visitors for the current year were assigned as follows:

217 Dr. Gödel
219 Prof. Taub
319   "   Trjitzinsky
320   "   Siegel
321   "   Pall
322   "   Kakutani

It was also voted to assign one of the smaller rooms in Fine Hall (109) to

Professor Pauli, and to reserve table space in the north room of the library

for other visitors.   (Professor Fubini has been invited by Professor Einstein

to use Room 227, and Professor Frink by Professor Alexander to use Room 130.)

2.   The matter of contributing towards the expenses incurred by

Professor Pauli in coming to the United States was discussed, though no

formal recommendation was voted.   It was suggested that a sum of $500 might

be contributed from the $900 remaining in the stipend fund.

3.   The question of whether or not Dr. Eisenbud should be appointed

as an assistant to Professor Pauli was left in the hands of Professor Weyl.

[Later, Fine 108 was assigned to Professor Bourgin; leaving Fine 110

with telephone (Ext. 586) for general use.]

                                        J. W. ALEXANDER

                                                Secretary

October 18, 1940

Memorandum for the Faculty of the School of Mathematics

At the meeting of the Board of Trustees on
October 14, 1940, the Budget Committee recommended that
the sum of $15,000.00 be reserved for stipends in the
School of Mathematics for the academic year, 1941-1942.
When the budget for the next academic year is finally adopted
in April, it is possible that this amount may be somewhat
enlarged, but it is thought that the award of stipends could
be more wisely made if the faculty of the School of Mathematics
had early notice of the minimum amount on which they could
count.   This action was accordingly recommended by the
Budget Committee and approved by the Trustees.

Frank Aydelotte
Director

FA:ESB

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
October 19, 1940

Present: Profs. Einstein, Morse, Veblen, v.Neumann, Weyl, and Alexander (Secy.)

1.   A memorandum from Dr. Aydelotte was received [attached to
the ribbon copy of these minutes], announcing that the Board of Trustees
had allocated $15,000 to the School of Mathematics as a stipend fund for
the year 1941-42.   According to the memorandum, further funds might be
available later.

2.   It was voted to send out the usual notices to Science and
the Bulletin of the American Mathematical Society announcing that appli-
cations for stipends should be filed before February 1st.

3.   It was voted to recommend that Dr. Gödel's stipend ($4,000)
be continued for another year.

4.   The question was raised of how to assist Professor Siegel
in his efforts to secure a visa for Dr. Helene Braun.   It was recommended
that Miss Braun be invited to the Institute for one year and offered a
stipend of $1200, with the understanding that, of this sum, the Institute
would contribute $500 (towards travel expenses) and that the remaining
$700 would be deducted from Prof. Siegel's present stipend.

5.   It was voted to recommend that Prof. Siegel's stipend of
$3000 be continued for another year.   (The question of raising the sti-
pend was deferred for later consideration.)

6.   It was voted to invite Dr. Samelson (student of Hopf at
Zürich) to the Institute for one year, provided funds to finance Dr.

Samelson's visit could be secured from outside sources.   (It is reported

that Mr. Harold K. Hochschild has offered to finance the visit.)

7.   The question of offering stipends to Drs. Cole, Post and

Hille was discussed, but action was deferred.

J. W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
          November 28, 1940

Present: Dr. Aydelotte and Professors Einstein, Morse, Veblen, von Neumann,
          Weyl, and Alexander (Secretary)

          1.   It was voted to offer Professor Joseph L. Doob a stipend of

$1,500 (half of his salary) for the year 1941-42; and to renew Professor

Shizuo Kakutani's stipend of $1,500.

          2.   Professor Morse agreed to write to Professor Kenneth S. Cole

expressing the hope that he would receive a Guggenheim Fellowship and that

he would come to work at the Institute.

[Note.   The board which grants the Guggenheim Fellowships has its first

meeting on February 1, and its second meeting on March 8.]

          3.   Dr. Aydelotte agreed to communicate with Dr. Flexner to see

whether the anonymous donor of Professor Guido Fubini's stipend would be

willing to contribute again for another year.   He also agreed to communicate

with the Rockefeller committee about the possibility of rendering assistance

to Professor Jacques Hadamard.

          4.   Dr. Aydelotte also agreed to see Professor Eisenhart about a

proposed change of rooms allocated to the Institute in Fine Hall.

          5.   Professor Weyl agreed to find out whether or not Dr. Robert

M. Thrall would like to spend another year at the Institute, and whether or

not the University of Michigan would extend his leave of absence.

          6.   Professor von Neumann agreed to inform himself about the

work of Dr. Seymour Sherman.

7.   Dr. Antonio I. Flores was suggested as a candidate for assistance from the Rockefeller committee.

8.   Dr. Aydelotte reported that he had discussed the case of Dr. Blackwell with Professor Eisenhart and that Professor Eisenhart had agreed, in principle, that Dr. Blackwell should be allowed to attend lectures in Fine Hall.

J. W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics with
Dr. Aydelotte held February 12, 1941

Present: Dr. Aydelotte and Professors Einstein, Morse, Veblen, von Neumann,
Weyl, and Alexander (Secretary).

1. The meeting was called by Dr. Aydelotte primarily to discuss
the question of emergency aid to European scientists.

In response to a request from the Rockefeller Foundation that we
select from a list which they presented, the names of several European sci-
entists who would be particularly welcome at the Institute for Advanced
Study, it was moved that we give our special endorsement to Professors Paul
Langevin, Jean Perrin, and Henri Lebesgue.

It was decided to postpone the question of aid to Professor Hada-
mard, with the idea of bringing up the matter again if an emergency should
arise.

Dr. Aydelotte

2. It was suggested that we recommend to the Rockefeller Founda-
tion the advisability of contributing funds to the Society for the Protection
of Science and Learning, so as to assist the latter organization in providing
aid to refugee scientists living in England.

3. Professor Giorgio de Santillana's request that he be admitted
as a member of the Institute for Advanced Study was discussed. The matter
was placed in Professor Weyl's hands for further study. It was agreed that
if he were sent temporarily by Harvard University the request should be
granted.

4. It was voted to admit Dr. Felix Adler, now in Princeton, as
a member of the Institute for the present term.

5.   It was recommended that Dr. Aydelotte notify the Director of the Rosenwald Fund that the Institute would welcome having <u>Mr. David Blackwell</u> as a member.

6.   It was voted that keys to Room 110 in Fine Hall be issued to members of the Institute on request through Professor Veblen.

7.   In response to a request from the Institute for Advanced Studies (in Eire) it was voted to purchase and send to that organization copies of mimeographed notes of lectures by members of our mathematical faculty.   The matter was left in the hands of Professor Weyl.

J. W. Alexander

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
        February 19, 1941
Present: Professors Morse, Veblen, von Neumann, Weyl, and Alexander, Secretary

        1.   It was voted to hold a meeting on Saturday, March 1st,

at 9:30 A.M., to discuss the allocation of stipends for the next academic

year.

        2.   It was voted that arrangements be made to hold a Mathematical

Tea in the near future.   March 1st was suggested as a possible date.   Ar-

rangements were left in the hands of Professor Veblen.

        3.   Professor von Neumann reported that Dr. Aydelotte was nego-

tiating with the Emergency Committee in Aid of Displaced Foreign Scholars

on behalf of Dr. Mosztowski of Warsaw, Poland.   The group expressed its

interest in the success of these negotiations.   It was recommended that the

Institute be ready, in case of necessity, to contribute a sum not to exceed

$500 per annum for two years towards a grant to be made to Dr. Mosztowski

by the Committee, with the understanding that the Institute could not assume

responsibility for the future placement of Dr. Mosztowski in this country.

        4.   Attached to the official copy of these minutes is Dr. Ayde-

lotte's report of February 17, 1941, on his conference at the Rockefeller

Foundation.

                                        JAMES W. ALEXANDER

                                              Secretary

February 17, 1941

MEMORANDUM FOR THE FACULTY OF THE SCHOOL OF MATHEMATICS:

I had a talk with Dr. Hanson and Mr. Miller in Dr. ~~Warren~~ Weaver's office of the Rockefeller Foundation about the proposals of Professors Laugier and Rapkine that we request funds to bring Langevin, Lebesgue, and Jean Perrin to the Institute. Mr. Miller tells me that they feel obliged to refuse help to both Langevin and Perrin on the score of age, and since there is no evidence that Lebesgue is in any particular danger at this moment they are not prepared to appropriate any funds for him.

Mr. Miller understands that Ambassador Bullitt is arranging to bring Langevin to the United States. What will happen to him here Mr. Miller does not know, but he promises to send me any information he may receive. I told him that we should always be interested in making a place for Langevin at the Institute if funds could be found for his support.

FRANK AYDELOTTE

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
March 1, 1941

Present: Professors Morse, Veblen, von Neumann, Weyl, and Alexander, Secretary

1.   A committee consisting of Professors Veblen and Weyl was appointed to go over with Dr. Aydelotte the question of stipends for the year 1941-42. (See Memo. pp. 69a—)

2.   It was voted that a grant of $1500 be offered to Professor Guido Fubini, and a grant of $1800 to Dr. Ralph S. Phillips.   It was also voted that a grant of $1500 be offered to Dr. Seymour Sherman.contingent on his not receiving an assistantship (see 8 below).   [The committee should raise the question of obtaining funds for Professor Fubini from outside sources, if possible.]

3.   It was voted that we make a token appropriation of $500 for Professor Einar Hille for the period up to the Christmas recess.

4.   Among the applicants for stipends the following were selected as persons to whom we should like to offer stipends if funds were available:

> * J. Wallace Givens
> Walter J. Harrington
> Irving Kaplansky
> Ellis R. Kolchin
> * Joseph Lehner
> Dorothy Maharam
> Gunnar Randers
> * Lawrence Ringenberg
> * Leonard J. Savage
> * George W. Whaples

It was voted to transmit this list to Dr. Aydelotte and to urge that every effort be made to raise funds, at the very least for the five applicants starred in the list.

5.   It was moved that Professors Morse and von Neumann draw up for Dr. Aydelotte a statement on the work done by the Mathematical Faculty, combined with a general declaration of policy.

6.   It was moved that Professor von Neumann take up with Dr. Aydelotte the question of continuing negotiations with the Rockefeller Foundation or the Emergency Committee about Dr. Mosztowski.

7.   It was voted to remind Dr. Aydelotte about writing to the Rosenwald Fund concerning Mr. David Blackwell.

8.   Professor Alexander reported that he was expecting to have Mr. A. H. Stone as his assistant for the year 1941-42, but that he would like to offer the position to Dr. Sherman if Mr. Stone should be recalled to England.

JAMES W. ALEXANDER

Secretary

MEMORANDUM OF CONVERSATION MARCH 5, 1941, BETWEEN DR. AYDELOTTE AND PROFESSORS WEYL AND VEBLEN

1. Professors Weyl and Veblen reported the recommendation of the professors of the School of Mathematics that the following stipends should be awarded:

> Guido Fubini ------ $1,500
> Seymour Sherman --- 1,500
> Ralph S. Phillips 1,800

With regard to Fubini the recommendation was that Dr. Aydelotte send him immediate notice of his appointment, since this is needed in order that Professor Fubini be able to make his arrangements for next year. It is hoped, however, that Dr. Aydelotte will be able to secure the funds for this appointment from the same source which gave them during the last two years. If this proves impossible they will have to come out of the general stipend fund.

It was suggested that Sherman and Phillips be notified by the mathematical professors, but that formal notice from the Director be postponed until later. In the case of Sherman the understanding is that he will become Professor Alexander's assistant in case this post is not occupied by Mr. Arthur H. Stone. In the case of Phillips, who is now at the University of Washington in exchange for Professor Taub, the understanding is that there is some chance of his being offered a teaching position, in which case he will be urged to accept it.

2. With these appointments the total stipend commitments are as follows:

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Dr. Helene Braun --------- $  500  [in case she is able to come
Prof. Joseph L. Doob -----  1,500                    to Princeton]
Dr. Kurt Gödel -----------  4,000
Prof. Shizuo Kakutani ----  1,500
Prof. Carl L. Siegel -----  3,000
Dr. Robert M. Thrall -----  1,800
Prof. Guido Fubini -------  1,500
Dr. Ralph S. Phillips ----  1,800
Dr. Seymour Sherman ------  1,500  × Resigned
                          _____
                          $17,100    Total budget
                                     Chandrasekhar $500
```
Can't come

3.   The fact that Dr. Brauer has this year devoted most of his time to the library and to the general purposes of the School of Mathematics rather than to Professor Weyl's work was discussed at some length, and it was recognized that this condition is likely to continue for at least another year.   It was therefore decided that Dr. Brauer will next year be appointed a general assistant to the School of Mathematics, and that Professor Weyl will be able to select another assistant for his scientific work.   It is understood that he will select Dr. George W. Whaples.

4.   Since the stipend appointments listed above exceed the budget appropriation of $15,000 by $2,100, and the appointment of an additional assistant makes an increase of $1,500 in the total mathematical budget, it was understood that in case some of these stipend appointments are not accepted (and it is expected that this case will arise) no replacements will be made without full consultation with Dr. Aydelotte.

5.   Professors Weyl and Veblen reported the recommendation of the mathematical group that a token stipend of $500 for the first term be offered to Professor Einar Hille of Yale University.   It was agreed to defer this question until it is known whether the appointments authorized above

will be made use of.

6.   It was reported that although the total number of applications for stipends is somewhat smaller this year than in previous years, there are nine candidates for whom no provision has been made who appear to be of very high caliber and whom it would be very desirable to appoint:

* J. Wallace Givens
Walter J. Harrington
Irving Kaplansky
Ellis R. Kolchin
* Joseph Lehner
Dorothy Maharam
Gunnar Randers
* Lawrence Ringenberg
* Leonard J. Savage

In this list four candidates who seem to be preferred for one reason or another have been indicated by stars.   The opinion was expressed that it is a desideratum of the first order that the stipend fund should be restored to the amount of $30,000.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
September 13, 1941

Present: Professors Morse, von Neumann, Weyl, and Alexander, Secretary.

1.   The following resignations and appointments, which occurred
during the summer recess, were recorded for the minutes:

a. Dr. Abraham Schwartz resigned his assistantship to Professor Veblen.

b. Drs. J. Wallace Givens and Seymour Sherman relinquished their stipends,
   totaling $3,500.

c. A grant of $500 was made to Professor Subrahmanyan Chandrasekhar for resi-
   dence in Princeton during October, November and December, 1941.

2.   Professor Weyl reported that, in all probability, Dr. Helene
Braun would be unable to come to the United States, and that the stipend of
$500 allocated to her would therefore be available for other uses.   It was
decided to postpone final action on the matter until the return of Professor
Siegel.

3.   It was voted that Professor von Neumann confer with Dr. Aydelotte
about the appointment of one more junior stipendee and about the question of
inviting Professor Hadamard to give a short series of lectures at the Institute.

JAMES W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
September 19, 1941

Present: Professors Einstein, Morse, von Neumann, Weyl, and Alexander, Secretary.

1.   Professor von Neumann reported on his conversation with Dr.

Aydelotte as follows:

a. Funds released by the resignation of Dr. Givens [$2000] would return to the
General Fund of the Institute, in accordance with a previous agreement.
Funds released by the resignation of Drs. Sherman [$1500] and Braun [$500]
would be available to the School for further use.   However, Dr. Aydelotte
wished to consult with Professor Siegel before disposing of funds reserved
for Dr. Braun.

b. Dr. Aydelotte also favored extending an invitation to Professor Hadamard
as lecturer.

2.   ~~Nevertheless~~ It was voted that we offer a stipend to Dr.

Norman Davids for the second term of 1941-42, the stipend to be $900 or $750

according as Dr. Davids is married or single.

3.   It was voted that we invite Professor Hadamard to give three

lectures at the Institute, at a stipend of $300.

4.   It was voted that any money not allocated to stipends be

turned over to the School's fund for visiting lecturers.

JAMES W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
October 24, 1941

Present: Professors Einstein, Morse, von Neumann, Veblen, Weyl, and Alexander,
Secretary

1. Professor von Neumann reported that the American Physical Society and the American Association of Physics Teachers are to meet in Princeton on December 29-31, 1941, and suggested that the Institute collaborate with the University in entertaining the delegates. He was appointed a committee of one to confer about the matter with Dr. Aydelotte and Professor Henry D. Smyth.

2. Professor Weyl reported that a stipend of $1000 had been granted to Dr. Gerhard P. Hochschild with the understanding that Dr. Hochschild be allowed to continue teaching at the University but that he be expected to drop other incidental work for the University.

3. For the record it is noted that Mr. Gerhard K. Kalisch has been appointed assistant to Professor Veblen, and that a stipend of $750 for the second term has been accepted by Dr. Norman Davids.

4. Professor von Neumann reported that a position as proofreader for the Annals is open at a salary of $400. It was voted that the position be offered to Miss Maharam, subject to the approval of the Annals editors. It was also voted that an additional stipend of $500 be raised for Miss Maharam. Professors Veblen and von Neumann were delegated to negotiate the details.

5. Professor Veblen was delegated to find out from Dr. Aydelotte the exact situation as to funds available for stipends: the amount contributed by the Institute, the amounts by various foundations, etc.

6. The matter of selecting dates for Professor Hadamard's lectures was left in the hands of Professor Weyl.

7. Professor Veblen brought to the attention of the group the candidacy of Dr. Shiing-shen Chern for a stipend. The reaction was very favorable, but no definite action was taken.

8. Professor von Neumann raised the question of finding a position for Dr. Antonio Monteiro.

9. Someone remembered that the time is at hand to negotiate with the Rockefeller Foundation about extending their grant to Professor Wolfgang Pauli.

10. For the sake of the record, a copy of the report to Dr. Aydelotte by Professors Morse and von Neumann on the activities of the School of Mathematics is appended.

<div align="right">
JAMES W. ALEXANDER

Secretary
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REPORT ON SCHOOL OF MATHEMATICS
by
Marston Morse and John von Neumann

The great difficulties of describing adequately the work of the
mathematical group are obvious.   Apart from being a highly technical and
finely differentiated science, mathematics is among other things a language
differing no little in its words, considerably in its grammar, and absolute-
ly in its syntax, from any other language used by men.   And from its very
nature -- in fact this is the main reason why mathematical language was in-
vented -- its contents cannot be translated into any other language.   It
is only fair to expect that any attempt to describe the contents of mathe-
matical research cannot convey essentially more of the essence of the sub-
ject than would an attempt to describe the "contents" of a Chinese poem.

The only thing one may reasonably try to describe is the general
tendency and purpose of such research, and the spirit, the atmosphere, in
which it is undertaken.

One must realize, above all, that there is a very particular double
character which pervades all mathematical work.   It is perfectly true that
mathematics has practical applications.   These are sometimes very indirect --
for example, applications to mathematical physics, which in turn are justified
by applications to experimental physics, which in turn are justified by
applications to engineering, etc. -- but they are applications nevertheless.
It is even true that much, if not most, of the best mathematical inspiration
has been directly or indirectly derived from "applied" problems.   Neverthe-
less most mathematical research is usually undertaken without any regard to

such applications, and it is strongly to be suspected that its quality could only suffer if the mathematician kept the applications constantly in mind. As matters stand, they sometimes never enter his mind, and it is by no means established that this is always a loss. It is very difficult to do justice, in any finite number of words, to this situation and to all its nuances, but it is necessary to keep it in mind when visualizing the nature of mathematical research.

Thus when dealing with mathematics it is probably more useful to judge it by the same standards by which a creative art is judged,- that is, by esthetic standards. The esthetic angle may escape the layman who does not speak the "foreign language" in which the intellectual effort goes on. It may also seem strangely disconnected with the application which may ultimately be made of mathematical results. But it is there nevertheless, and ignoring it would lead to a complete misunderstanding of mathematics.

The above indications give probably a less complete picture than some lines written by Dr. Abraham Flexner in "I Remember", which were intended to convey an idea of the purpose and nature of the Institute for Advanced Study, but their validity applies to the study of mathematics. Dr. Flexner writes as follows:

> "The Institute for Advanced Study was intended, by reason of its constitution and conception, to be mainly a research institute. From an unknown source I quote the following:
> The deepest joy in life is to be creative. To find an undeveloped situation, to see the possibilities, to identify yourself with something worth while doing, put yourself into it, and stand for it -- that is a satisfaction in comparison with which superficial pleasures are trivial."

Referring to teaching:

> "Persons who require to be drilled or taught hard do not belong within

the Institute for Advanced Study. The level of the teaching and its
form mark it off sharply from college teaching, from most university
teaching, from technological or professional teaching. This granted,
the professor himself benefits, if for an hour or two weekly, in addi-
tion to his own research and the supervision of a few investigations,
he discusses a larger theme with a small, thoroughly competent, body.
He is thus assisted in preserving his own perspective, and he has a
stimulus to wide reading and broader contacts."

With reference to scholars in the Institute:

"These men presumably know their own minds; they have their own in-
dividual ways; the men who have, throughout human history, meant most
to themselves and to human progress have usually followed their own
inner light; no organizer, no administrator, no institution can do
more than furnish conditions favorable to the restless prowling of an
enlightened and informed human spirit, seeking its intellectual and
spiritual prey. Standardization, organization, making trifles seem
important, do not aid: they are simply irksome and wasteful."

The members of the School of Mathematics believe in these prin-
ciples so clearly stated by Dr. Flexner, and as far as they are able have
endeavored to embody them in their research and in their contacts with fel-
low scholars. We are concerned with the foundations of mathematics and
mathematical physics, with the discovery and development of those principles
of mathematics which will give deeper harmony to mathematics as an art, and
greater power as a science. It is true that some of us are concerned at
the moment with important applications of mathematics to ballistics, avia-
tion, and other aspects of engineering. We regard these activities as tem-
porary,- although inevitable and necessary as the need to live. The long-
term conception of our true functions would relegate these diversions to a
secondary place. The order in the world which we desire and the peace which
we seek, will make technological studies the servant and not the master of our
lives. The path to knowledge for its own sake will still be open, the cre-
ative artist or scientist will still be free, and objective truth will still
be revered.

The limitation of the value of any specific statement of the contents of mathematical research should be clear from what was said above. It may nevertheless be useful to append descriptions of the work of the permanent members of the Institute as they see it:

James W. Alexander

For the last 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.

Albert Einstein

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 to reach thereby a new understanding of various phenomena which so far could be described only on an entirely different basis,- in the first place, of the quantum phenomena and 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 the last years the collaboration of his assistants, Drs. Bergmann and Bargmann, has proved valuable.

Marston Morse

Morse had devoted the major part of the last ten years to the development of a "variational theory in the large". This theory originated largely 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 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 papers 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 is engaged at the moment in writing a joint paper with George Ewing, one of the professors visiting the Institute this year.

Morse was recently elected President of the American Mathematical Society. About a year ago he organized and has since directed the work of the War Preparedness Committee of the American Mathematical Society and the Mathematical Association of America. These societies have a joint membership of more than 5000 mathematicians. This Committee has various subcom-

mittees dealing with questions of technical aid to the Army or Navy, with secondary school education in its bearing on national defense, with the proper use of draftees possessing scientific qualifications.   A recently added subcommittee will investigate the supply of and demand for applied mathematicians and teachers in relation to the national defense.*

John von Neumann

In the last 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.   But 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 theory of games.

Professors Lefschetz, Bohnenblust and von Neumann form the editorial board of the Annals of Mathematics.   Von Neumann is also co-editor of two international journals.   Outside of purely mathematical research, he is engaged

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* For further details see "Mathematics in the defense program", The Mathematics
   Teacher, May 1941.   A copy is appended.[to Dr. Aydelotte]

in some projects of national defense: chief consultant on ballistics of the
War Preparedness Committee of the American Mathematical Society and the Math-
ematical Association of America, member of the Scientific Advisory Board of the
Ballistic Research Laboratory at Aberdeen Proving Ground, and consultant to one
of the sections of the National Defense Research Committee now part of the
Office of Scientific Research and Development.

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 is in Princeton for this summer.

Oswald Veblen

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 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 (until now
at Cornell University, but going to Northwestern) are working with Veblen
this summer, and there is good reason to expect that the book will be actually
finished by fall. Several other men, as van Stockum (now at Baltimore) 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 depart to their several stations with renewed enthusiasm, is about as much as the Institute can profitably attempt to do in mathematics.

During the last two years Veblen has devoted a good deal of effort of one sort or another to the founding of the "Mathematical Reviews". This must of course be considered as completely extra curricular. It is particularly fortunate that it was possible to locate this journal (which, like all journals, is an auxiliary to scientific work and not to be confused with scientific work itself) at another place than Princeton.

Hermann Weyl

Although Weyl cannot and should not be pinned 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 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 a 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.

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. The credit for it should go to Weyl's present 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.

For years Weyl has been busy with helping European mathematical refugees, either directly, or through correspondence with the Friends Service Committee and other interested scientists and committees. During the last months he has given considerable time to his job as co-editor of the American Journal of Mathematics.

The picture of work going on in the Institute would be utterly in-

complete if the work of the temporary members were not referred to. It will not be attempted, however, to give here a detailed elaboration like the above. This omission should, of course, not be taken at all as a judgment of value or importance. It is merely that such a compilation would be technically difficult, and the main tendencies represented in the Institute are probably indicated essentially by the above. It should be said, however, that among the temporary members of the Institute are absolute leaders in their fields, whose recent work has been of exceptional importance:

Kurt Gödel

He established a decade ago the impossibility of certain proofs in logic and -- for the first time in the history of mathematics -- the impossibility of deciding certain problems in arithmetic and analysis. In the last years he found the (negative) solution of the famous "continuum problem" which had resisted all efforts for over forty years.

Carl L. Siegel

He had previously done outstanding work in the analytic theory of numbers and the theory of quadratic forms, which he has continued and extended during his stay at the Institute. Recently he has also made important contributions to celestial mechanics.

Some statistics concerning the temporary members who participated in the work of the School of Mathematics are appended. [Attached to official copy of Minutes.]

July 14, 1941

STATEMENT RE TEMPORARY MEMBERS OF IAS. SCHOOL OF MATHEMATICS
(including visiting professors like Dirac, but exclusive of assistants)

Numbers are approximate:

Candidates include not only formal applicants, but candidates suggested by the IAS professors for invitations, and others suggested from outside

Members registered include some who resigned their stipends after a couple months, and others who planned very short visits

Positions held,- information received not always accurate ("Prof. 1936-41" when given in 1941 is not sure to mean position terminated 1941. Dates of termination of European positions not always reported.)

From abroad includes all who first came to the IAS from abroad, though Bergmann, for instance, has remained at the IAS for 5 years

IAS stipends include payments administered by IAS from special funds from outside earmarked for special individuals,- e.g. Fubini and Pauli; also payments of as little as $200 per year

	Number of Candidates	Members Registered	Holding Positions	Without Position	From Abroad	From U.S.	With IAS Stipends	Other Fellowships
1933-34	*	23	12	11	5	18	9	8 [1]
1934-35	*	36	16 [2]	20	8	28	19	12 [3]
1935-36	59	43	14	29	19	25	25	14 [4]
1936-37	52	47	21	26	19	28	21	13 [5]
1937-38	55	25	13	12	8	17	17	2 [6]
1938-39	53	23	12	11	11	12	15	2 [7]
1939-40	57	23	13	10	7	16	14	5 [8]
1940-41	48	23	11	12	9	14	11	5 [9]
1941-42	34?	25?	8?	17?	13?	12?	9?	9? [10]

[1] 3 Rockefeller Foundation; 5 NRC.

[2] Including 2 part time during 1934-35

[3] 2 RF; 10 NRC.

[4] Inst.Internatl.Ed. 1; CRB 2; NRC 5; Phil.Soc. 1; Baldwin Piano Co. support of research employee; Cambridge Univ. 1; Commonwealth Fund 3

[5] 1 CRB; 5 NRC; 1 Junta de Ampliacion de Estudios; 1 Amer.Asso.Univ.Women; 2 Commonwealth; ~~Indemnitorexxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ 1 Univ. of Oslo; 1 Academia Sinica; 1 Carnegie Trust (Scotch) Fellowship

[6] 1 NRC; 1 Grants from Carnegie Trust and St. John's College, Cambridge

[7] 1 CRB; 1 Commonwealth

[8] 1 C.B.Keen (Brown Univ.); 1 Commonwealth; 1 Leverhulme; 1 Univ. of Mich.; 1 Rhodes

[9] 3 NRC; 1 Emmy Noether (Bryn Mawr); 1 Guggenheim

[10] 1 Rosenwald; 4? Guggenheim; 2 NRC; 1 Univ. of Mich.; 1 Sheldon (Harvard)

* No record.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
      February 7, 1942

Present: Professors Einstein, Morse, von Neumann, Veblen, Weyl, and Alexander,
                                                              Secretary

        It is recorded that since the meeting of the professors on October 24, 1941, it was agreed informally to request Dr. Aydelotte to offer Professor Guido Fubini renewal for the year 1942-43 of his stipend of $1500.   This Dr. Aydelotte did on November 28, 1941, and further correspondence ensued.

                              ----

        1.   It was agreed to schedule Professor Jacques Hadamard's three lectures for the afternoons of March 2d, 4th, and 6th, respectively, as suggested by the lecturer.

        2.   The problem of allocating stipends for the year 1942-43 was discussed very informally.   The following is a record of the main points taken up:

        (a) Professor Einstein agrees to ask Professor Guido Fubini about the latter's plans for the next academic year.

        (b) The question of how to supplement the grant made by the Rockefeller Foundation to Professor Wolfgang Pauli should be discussed with Dr. Aydelotte. It is thought desirable to supplement the grant by adding $1000 from our own funds.   Other cases to be taken up with Dr. Aydelotte are those of Professor Shizuo Kakutani and Dr. Hans Samelson.   The opinion is in favor of continuing Kakutani's stipend and renewing the present arrangement with Samelson.

        (c) Professor Morse agrees to ask Professor Joseph L. Walsh whether or not the latter will be able to get his leave of absence for the coming year. It is voted that we offer Professor Walsh a stipend of $500 towards defraying his expenses.

(d) Professor Veblen agrees to talk to Professor Russell about the possibility of securing an appointment for Dr. Gunnar Randers on the Princeton University faculty.

(e) The following candidates are listed for further consideration. Drs. Norman Davids, Ellis R. Kolchin, Maxwell Reade, Owen G. Owens, Audrey Wishard, Paco A. Lagerström, Henry B. Mann.

(f) Professor Veblen suggested that we ask Dr. Aydelotte to set aside a special fund (not to be included in the School's regular budget) for Professor Shiing-shen Chern, on the very slim chance that he may be able to visit the Institute in 1942-43.   [No formal action taken.]

(g) Professor von Neumann reports that Dr. Leonard J. Savage will be his assistant for the year 1942-43.

JAMES W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 11, 1942

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

1. Professor Guido Fubini's definite resignation was recorded.

2. It was agreed that an attempt should be made by Dr. Aydelotte
and Professor Einstein to secure support for Dr. Kurt Gödel and Professor
Carl L. Siegel from the Rockefeller Foundation, but that the Institute should
defray their stipends if the Foundation refuses.   (Gödel $4000; Siegel $3000.)

3. It was voted to add $1000 from Institute funds to the stipend of
$3000 paid to Professor Wolfgang Pauli by the Rockefeller Foundation.

4. It was voted that we offer Dr. Maxwell Reade a stipend of $1500.

5. No conclusion was reached about Professor Shizuo Kakutani, but
the question was raised whether arrangements could be made for the Japanese
Government to support him in this country.

6. Dr. Aydelotte agreed to write to Mr. Hochschild about Dr. Hans
Samelson after Professor Weyl has talked the matter over with Samelson.

7.   It was suggested that we try to make a joint arrangement with
Princeton University about Drs. Gunnar Randers and Valentin Bargmann.

8.   Dr. Aydelotte agreed to have a talk with Dr. Bargmann and to
urge him to take advantage of the favorable situation now existing and to
look for a permanent teaching position.

James W. Alexander

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
April 21, 1942

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

1. Dr. Aydelotte and Professor Morse were requested to draft a letter
to Osaka University, through proper Government channels, offering to make ar-
rangements for the support of Professor Shizuo Kakutani in this country in ex-
change, say, for the support of some American in Japan. It was voted to set
aside $1500 to be used, in case of necessity, as a stipend for Professor Kaku-
tani.

2. It was voted to offer Miss Audrey Wishard a stipend equal to the
smaller of the following two figures: (a) half her present salary at Vassar
College; (b) one thousand dollars. (The correspondence with Miss Wishard
was left in the hands of Professor Veblen.)

3.   It was voted that Professor Guido Fubini be invited to be a
member of the Institute, in absentia, for the year 1942-43.

4. Dr. Aydelotte was requested to try to persuade the University of
(teaching assistantship)
California to extend Mr. Shuichi Kusaka's fellowship while allowing him to re-
main in residence in Princeton.

5. Dr. Aydelotte was requested to try to make arrangements with the
Rockefeller Foundation to bring Professor Shiing-shen Chern from China to work
at the Institute.

6. It was suggested that some arrangement might be made with the Gov-
ernment, through the Rockefeller Foundation, to have distinguished aliens who
are interned in this country assigned to the Institute.

James W. Alexander

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
        June 15, 1942

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

1. A stipend of $500 was voted to Dr. Shuichi Kusaka.

2. Professor Weyl was authorized to make inquiries about
Dr. Irvin S. Cohen as a possible candidate for a stipend.

3. Professor Morse was authorized to write to Professor Dresden to
inquire about talented women mathematicians.

4. The resignation of Dr. Maxwell Reade was recorded.   It was also
recorded that Dr. Alfred T. Brauer had received an assistant professorship
pro tem., at the University of North Carolina, and that Dr. Felix Adler had
been approached at the University of Wisconsin.

5. The sentiment was expressed that it would be desirable to sep-
arate the funds for stipends from those for assistants.

6. Professor Morse pointed out that there would be an urgent need
for additional stipend funds at the end of the war, since many young mathe-
maticians would be drafted out of the army.

                                    James W. Alexander
                                            Secretary

THE INSTITUTE FOR ADVANCED STUDY

In lieu of missing Minutes of a 1942-1943 meeting of the Professors of Mathematics with Dr. Aydelotte, before February 15, 1943:

From letter of O. Veblen to Prof. S. S. Chern, Kunming, China, February 1, 1943:

> I have talked with my colleagues, and we should be much pleased if you could spend a year at our Institute. I think there is no doubt that we could obtain for you a stipend of $1,500. for the academic year 1943-1944. The difficulty, however, would be in meeting the expenses of your journey to America and back. I am making inquiries from the Division of Cultural Relations of our State Department. Perhaps you could arrange it somehow as an enterprise of the Chinese Government in promoting cultural relations with the United States. I am making the argument that it is very important for China to develop leaders in the various fields of scholarship, and for the United States to cooperate in this process.

O. Veblen to Willys R. Peck, Division of Cultural Relations, U.S. Department of State, February 1, 1943:

> I have discussed the question with my colleagues and with the Director of the Institute, Dr. Aydelotte. If it were possible for your organization to bring Dr. Chern to this country and to provide for his return to China, we should be glad to give him the leading place on our list of candidates for stipends in mathematics. This would insure him an income of $1500 for the year that he would spend with us.

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
February 15, 1943

Present: Dr. Aydelotte, Professors Einstein, Morse, Veblen, Weyl, and Alexander,
Secretary.

1. It was voted to offer Mr. Fumio Yagi a stipend of $500 for the second term of the present academic year.

2. It was voted to leave the matter of the reappointment of Dr. Shuichi Kusaka in the hands of Dr. Aydelotte, in the hope that some joint arrangement with the University of California might be arrived at.

3. It was suggested that Professor Weyl write to Professor Kline about the possibility of obtaining a teaching position for Professor Felix Bernstein.

4. It was moved that on some suitable occasion to be announced later, Professor Weyl say a few words in commemoration of the anniversary of the death of Copernicus.

5. It was confirmed that the Army be allowed to use the Institute rooms in Fine Hall.

6. It was voted that hereafter the Christmas fund to the Librarian of Fine Hall be discontinued.

7. It was suggested that Professor Einstein get in touch with Professor Dresden over the matter of raising money for the Hadamard Fund.

8. It is recorded that Dr. Irvin S. Cohen resigned his I.A.S. stipend after the first term to take a position at the University of North Carolina; and that Dr. J. Ernest Wilkins (Rosenwald Fellow) also left after the first term, to take a position at Tuskegee Institute.

JAMES W. ALEXANDER

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held
April 5, 1943

Present: Professors Einstein, Morse, Weyl, and Alexander, Secretary

It was voted to recommend the renewal of the stipends of Dr. Gödel,
Professor Siegel, and Professor Pauli for the academic year 1943-44. Dr. Gödel
now receives $4000, of which $3750 is contributed by the Rockefeller Foundation;
Professor Siegel receives $3000 (from the Rockefeller Foundation); Professor
Pauli receives $4000 of which $3000 is contributed by the Rockefeller Foundation.
The recommendation to renew the stipends was made with the understanding that
the contributions from the Foundation would be continued.

Two resignations on March 1, 1943, of assistantships are recorded:
Dr. Audrey Wishard McMillan resigned as assistant to Professor Weyl, to undertake
war work in the statistical office of Princeton Surveys;
Dr. William R. Transue resigned as assistant to Professor Morse, to become a
Junior Physicist in the U.S. Army Ordnance Department.

James W. Alexander

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics with Dr. Aydelotte, held April 12, 1943

Present: Dr. Aydelotte, Professors Einstein, Morse, Veblen, Weyl, and Alexander, Secretary

1.   Dr. Aydelotte reported that Professors Gödel, Siegel and Pauli had been notified of their reappointment for the year 1943-44.

2.   It was voted to keep $1000 in reserve for Dr. Shuichi Kusaka, but that he be advised to get a teaching job, if possible.   Dr. Aydelotte undertook to write to Swarthmore and Rochester Universities about the matter.

3.   Professor Veblen reported that he had received a letter from Professor Shiing-shen Chern announcing that the latter had been appointed, with a small stipend, by his university as one of the Chinese mathematicians to be sent to this country.   The grant of an Institute stipend of only $1000 to Professor Chern was voted, in consideration of the Chinese Fellowship.   The $1500 stipend previously approved [p. 79 of Minutes] was thereby rescinded.   Professor Veblen undertook to correspond with Professor Chern.   [Done.]

4.   Professor Weyl reported that he had received an application for Chuan-Chih Hsiung of Chekiang University.   However he felt that Professor Loo-keng Hua was a better candidate.   It was voted to offer the latter a stipend of $1000.   Professor Weyl undertook to attend to the correspondence.   (Done.]

5.   It was suggested that important scientific papers might be microfilmed and sent on to Chinese universities, and that the Philosophical Society might be willing to defray the expenses.   Professor Weyl undertook to discuss the matter with Professor Eisenhart.

6.   Professor Weyl reported that he would probably take on Mr. Fumio Yagi as his assistant, but that he was, as yet, undecided.

7.   It was voted to renew Professor Guido Fubini's appointment as member of the Institute in absentia.

8.   It was decided to omit the usual announcement about stipends in the Bulletin of the American Mathematical Society.

9.   It is recorded that Dr. Valentin Bargmann has accepted a full-time position in Princeton University, and his salary as assistant to Professor Einstein ends as of April 15.   He will continue to be treated as a temporary member of the Institute, with the possibility of resuming his position with Professor Einstein if the University position proves temporary.

James W. Alexander

Secretary

Since the stipend offered to Chern has been raised to $1500, I think it fair to do the same with regard to Hua, and move to recommend Hua for a stipend of the same amount.

Please vote below, and return to Miss Blake.

Hermann Weyl

Princeton, May 4, 1943

Vote: Yes   No

Alexander
Einstein
Morse
Veblen

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics with Dr.
  Aydelotte, held September 27, 1943

Present: Dr. Aydelotte, Professors Einstein, Veblen, Weyl, and Alexander,
                                                            Secretary

1.   Professor Weyl reported having been told by Professor Chern that, in all probability, Professor Loo-keng Hua would be unable to leave his family to accept the invitation sent him last spring by the Institute. No direct reply to the invitation has been received, and it is doubtful whether our letter ever reached Dr. Hua.   [See attached abstract of letter to L. K. Hua, May 10, 1943. And letter to S. S. Chern, May 3, 1943.]

2.   It was voted to invite Professor Godofredo Garcia of Peru to visit the Institute for a period of from two weeks to a month, and to offer him a stipend of $250.

3.   It was voted to invite Professor Tracy Y. Thomas to visit the Institute for two months (probably March and April 1944), and to offer him a stipend of $500.

4.   It was voted to delay action on an application for a stipend from Professor A. Adrian Albert, and to urge him, in the meantime, to apply for a Guggenheim Fellowship.

Professor Weyl undertook to write to Professors Garcia, Thomas and Albert.

                                        James W. Alexander
                                                Secretary

Abstract of letter from H. Weyl to L. K. Hua, May 10, 1943

I hope you have received my letter of April 14 offering you a stipend of $1000 in our School of Mathematics for the academic year 1943-44. I am glad to inform you now that I have been authorized by the members of our School and the Director of the Institute to increase the amount of the stipend offered you to $1500.

Even so it is clear that you will have to find funds from other sources to defray your traveling expenses and sustain your family in China while you are away.

*   *   *   *   *   *   *

In reply to your letter of March 15, I regret that the limited resources of our Institute do not make it possible to offer you more than the stipend mentioned above. But I wish to repeat how glad we should be to welcome in our midst a mathematical scholar of your distinction, and I hope that you will succeed in making the necessary arrangements.

May 3, 1943

Dear Professor Chern:

I received your letter of March 4 a few days ago, and have talked over the question of your stipend more fully with Dr. Aydelotte, who has also been in communication with Dr. Hu Shih. These gentlemen are convinced that the supplement of this Institute to your Chinese stipend is hardly sufficient for the purpose intended. I am therefore happy to state that I can now officially offer you a stipend of $1500 from our Institute. This we feel confident will be sufficient for your expenses while you are here, but it will be necessary for you to obtain from other sources the funds for coming and for your return to China.

With best greetings,

Yours sincerely,

Oswald Veblen

Professor S. S. Chern
P.O. Box 96
Kunming, China
OV:GB

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics with Dr.
Aydelotte, held January 31, 1944.

Present: Dr. Aydelotte, Professors Einstein, Morse, Veblen, Weyl, and Alexander,
Secretary

1. It was voted to renew the stipends of Drs. Gödel ($4,000),
Pauli ($4,000), and Siegel ($3,000). (As the grant from the Rockefeller Founda-
tion has expired, the stipends will have to be paid from the regular stipend
fund.)

2. It was voted to add $150 for the second half of the present
academic year, to the stipend which Mr. Ning Hu receives from the National
Tsing Hua University.

James W. Alexander,

Secretary

THE INSTITUTE FOR ADVANCED STUDY

Minutes of a meeting of the professors of the School of Mathematics held April 8,1944.

Present: Professors Einstein, Morse, von Neumann, Veblen, Weyl, and Alexander,

<div align="right">Secretary</div>

1.   It was voted to recommend the following stipends for the academic year 1944-45:

(i) For Professor Shiing-shen Chern $1500.

(ii) For Dr. Ning Hu $500 (to supplement the stipend which Dr. Hu expects to receive from his own university).

2.   It was voted to record in the minutes that the offer of a stipend of $1500 to Professor Loo-keng Hua was being held open for another year, and that Dr. Aydelotte was keeping in reserve the funds originally allocated to cover the offer.

3.   It is recorded also that $50 toward traveling expenses from California had been voted informally for a proposed visit by Professor Alfred Tarski, which has apparently been postponed.

<div align="right">James W. Alexander

Secretary</div>