THE INSTITUTE FOR ADVANCED STUDY

Founded by Louis Bamberger and Mrs. Felix Fuld

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School of Mathematics

Professors

James Waddell Alexander
Albert Einstein
Oswald Veblen
John von Neumann

Associate

Walther Mayer

Assistants

Charles Chapman Torrance
John Livezey Vanderslice

CALENDAR

1933–1934

October 2:	First term opens
December 20 — January 20:	Christmas recess
January 21:	Second term opens
May 1:	Second term closes

I

HISTORY

WHATEVER may be said of the limitations of American universities it cannot be questioned that abundant opportunities exist in most fields for work of college and university grade leading finally to the Ph.D. degree. In some fields universities provide admirable opportunities for work beyond the Ph.D. degree, but with the exception of medicine and certain other branches the country has not hitherto possessed an institution in which young men and women could continue their independent training beyond this stage and in which research could be carried on with adequate support without pressure of numbers or routine and unhurried by the need of obtaining practical results. To provide such opportunities Mr. Louis Bamberger and his sister, Mrs. Felix Fuld, established in 1930 the Institute for Advanced Study with an initial gift of $5,000,000, the capital of which was to be preserved intact.

It has been decided to locate the Institute at Princeton, New Jersey, and to begin work October 1, 1933, in the field of mathematics. The

authorities of Princeton University have been most helpful and have offered the Institute for the time being space in the new mathematics building, Fine Hall, which was opened in 1931. While the Institute and Princeton University will be organically and administratively entirely distinct, the faculties and students of the two institutions will coöperate in any direction that promises more favorable results than either institution can obtain alone.

II

ORGANIZATION AND ADMINISTRATION

THE founders of the Institute for Advanced Study desired to create an institution of learning or, as it has been put, a "paradise for scholars." In order that their ideals may be fulfilled, organization and administration will be kept simple and unostentatious, and as much responsibility and initiative as is possible will be left to the several Schools as they are created. The Board of Trustees is composed of laymen, scholars, and scientists. It is hoped that in this way perfect accord may be established between the administrative officers and the scholars who really constitute an institution of learning.

Salaries and retiring allowances will be provided so that the teaching staff may be freed from all financial concern and may feel under the strongest obligation to refrain from activities that bring a financial return without really being of high scientific or scholarly character — in other words, that the members of the staff may live up to the standard that has been created in the full-time departments of certain medical schools organized within recent years.

III

SCHOOL OF MATHEMATICS

THE following appointments have been made in the School of Mathematics: Professors — Albert Einstein, Oswald Veblen, James Waddell Alexander, John von Neumann; Associate — Walther Mayer; Assistants — John Livezey Vanderslice, Charles Chapman Torrance. It will be noted that the staff consists only of professors and their assistants, in this respect differing from the faculty of a university which has varied teaching responsibilities.

Inasmuch as only those students will be admitted who have already obtained the Ph.D. degree or whose training is equivalent to that represented by the Ph.D. degree and who are in addition sufficiently advanced to carry on and to coöperate in independent research, the number of students will be small. A few workers, who have been admitted for the year 1933–1934, already hold assured positions in university departments of mathematics and have given evidence of capacity for original and independent research. Mature persons of this kind will naturally receive preference in the matter of

admission. The staff will aid students in deciding the general methods and purposes of their work and, as occasion offers, in the details. Only such students will be admitted as are acceptable to the staff of the School and the Director of the Institute.

Instruction will be given either by individual contact with students, by seminars, by courses of lectures, or by other methods. Each professor will be free to follow such methods as he prefers and to vary them from year to year. A mathematical club already in existence will be conducted by members of the Institute and of Princeton University.

In 1932–1933 the principal subject taken up in Professor Veblen's seminar was Modern Differential Geometry. Among the topics discussed were the relation of generalized projective geometry to classical projective geometry, projective relativity, the theory of spinors, conformal geometry and its relation to unitary field theory. In 1933–1934 it is intended with the coöperation of Professor von Neumann to cover a wider range of subjects. The principal subject will probably again be Differential Geometry in its relation on one side to Topology and on another to Theoretical Physics. The program cannot be fixed definitely in advance because it must conform to the direction taken by the studies of those who are actively participating in it.