## Mrs. Korsch re Mrs. Geiringer, 2/29/44 -

Mrs. Korsch had heard of Mrs. Geiringer even before she left Germany. Mrs. Geiringer in Germany made quite a name for herself because she was one of the very, very few women who were so distinguished in Mathematics as to be elected to the exclusive mathematical societies in connection with the University of Berlin. Mrs. Korsch knows nothing about her marriage, but she has liked her as she has met her. Mr. Korsch used to take courses in Mathematics with some of the Berlin professors and sometimes Mrs. Geiringer was in the Korsch home in Berlin, so she has seen a little of her and approves of her very much.

J.E.P.

Extract from <u>Mrs. Geiringer's</u> 1944-45 report to the President:

"With your permission I worked for
the Applied Mathematics Panel of the National
Defense Research Council on problems of
Mechanics, connected with the war effort.
Confidential reports on this matter were
sent to the A.M.P. in New York. I also
reported to a group of co-workers on my
results. In connection with one of my
latest publications on Mathematical
Biology detailed comments were made by
Professor I.M.H. Etherington, University
of Edinburgh, Scotland which, together
with my answers, will be published in the
Annals of Mathematical Statistics."

Mrs. Geiringer was married in the summer of 1944 to Dr. Richard Martin Edler von Mises, Dr. Techn., Dr. (hon.), Lecturer on Aerodynamics and Applied Mathematics, Harvard University.

She prefers to continue to be known as Mrs. Geiringer (her maiden name), since that has been her professional name through the years.

M.C.R.

Dear Dr. Lehr:

We were delighted with Mrs. Geiringer and have appointed her to the vacant position here. I am awfully sorry that our living conditions are not so clear, as she may have told you, but we are in the difficult position of being really in the country and not in a suburb like Bryn Mawr so that there are no vacant houses around us, and naturally all those owned by the college have already been taken by those of longer service. To make matters worse a tremendous military establishment right in our own town has filled with officers and their wives every available spot within twenty miles of us. We are, however, going to do the best we can for Mrs. Geiringer, and in days like these when personnel changes so unexpectedly at the command of Washington, one can never tell.

I want to thank you very much for your interest and help, and hope that this will be as satisfactory an appointment from the point of view of Mrs. Geiringer as I am sure it will be from the point of view of the college.

Sincerely yours,

Dr. Marguerite Lehr Department of Mathematics Bryn Mawr College BRYN MAWR COLLEGE BRYN MAWR PENNSYLVANIA March 14, 1944

President E.J.Park Wheaton College Norton, Mass.

Dear Dr. Park:

On my return to Bryn Mawr I wish to tell you how much I am looking forward to devote myself to the work in the Department of Mathematics at Wheaton College. I shall do my very best to be a guide as well as a friend to my students and to cooperate with my colleagues. Let me thank you for the confidence you place in me in entrusting me with this position.

Sincerely yours

Hilda Geiringer

Hilola Geiringer

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A. N. WILLIAMS

PRESIDENT

PRESIDENT J EDGAR PARK WHEATON COLLEGE NORTON MASS=

THANK YOU FOR YOUR KIND OFFER WHICH I SHALL ACCEPT WITH

GREAT PLEASURE MAY I DISCUSS CERTAIN MINOR DETAILS OF

CONTRACT IN PERSON SATURDAY MARCH 11TH OR MONDAY OR

FRIDAY AFTERNOON AT YOUR CONVENIENCE IF IMPOSSIBLE PLEASE WIRE

AND I SHALL WRITE=

HILDA GEIRINGER. (45)

SWARTHMORE COLLEGE SWARTHMORE, PENNSYLVANIA MATHEMATICS AND ASTRONOMY

9 March 1944

President Edgar T.Park Wheaton College Norton, Massachusetts

Dear President Park:

work

With great pleasure I just heard that a professorship in mathematics at Wheaton College has been offered to Mrs. Hilda Geiringer. I have known about Mrs. Geiringer's for a great many years; I have become professionally acquainted with her since she came to this country several years ago. I have a very high regard for her as a mathematician and as a teacher. During one year sometime ago she conducted a seminar in advanced calculus and in mathematical statistics for a group of honors students at Swarthmore College. These students were much benefited by her stimulating personality and by her excellence as a scientist.

Allow me to congratulate Wheaton College upon this choice and to express the satisfaction it gives me that Mrs. Geiringer is thus put in a position to make an important contribution to the development of mathematics in this country.

Yours sincerely,

ad/kn

### Mrs. Geiringer and Miss Peters, 2/28/44 -

Of the two Mrs. Geiringer is immeasurably superior, although Miss Peter is a first-rate person. They both would be willing to come at the salary mentioned, but I really think that Mrs. Geiringer would probably become one of the best teachers of the college. Her English is very good. Her husband is dead and she has reassumed her maiden name. The very fact that she has two brothers, one of whom is Professor of Music in Boston University and the other in business firm (an engineer) in Boston, and that her daughter is teaching in Dana Hall makes her rather like the idea of coming here.

Miss Peters would do but I am afraid is too like Miss Watt again.

Mrs. Geiringer, 1939-44, has been continuously in the United States. I mentioned that the possible salary would be \$2,625; \$131 added for the T.I.A.A., and \$500 living, which would amount to \$3,256.

J.E.P.

WHEATON COLLEGE -

Norton, Massachusetts

Arthur D. Raybin
Director of Public Information

The Wheaton News Bureau ATlas 5-7722 Ext. 32

July 22, 1959

FOR RELEASE Friday, July 24

NORTON, MASS. -- Dr. Hilda Geiringer, who has been a professor of mathematics at Wheaton College since 1944, has retired, and has been named professor of mathematics, emeritus by the college's board of trustees.

A graduate of the University of Vienna, Dr. Geiringer came to this country in 1939. During World War II she did classified research work for the National Defense Research Council.

Through the years she has published more than 80 articles and several books in pure and applied mathematics. After the death of her husband, Dr. Richard von Mises, who was the Gordon MacKay Professor of Applied Mathematics and Aerodynamics at Harvard University, she started completing and revising his various posthumous works. This task is not yet completed.

At Wheaton Professor Geiringer taught several advanced courses in mathematics and the course she enjoyed giving the most -elementary mathematics. Dr. Geiringer, who is considered to be one of the outstanding teachers and scholars at Wheaton, will continue her work in mathematics while living in Cambridge and working at Harvard.

log of her films, reprints excerpts of some reviews for each film. Mickey Deans, Weep No More My Lady (1972), with Anne Pinchot, is an account of their life together. An account of Vincente Minnelli's life with Garland is included in his autobiography, I Remember It Well (1974), with Hector Arce. Mel Tormé, The Other Side of the Rainbow (1974), gives a detailed account of working with Garland in television. Henry Pleasants devotes a chapter to an analysis of her vocal style in The Great American Popular Singers (1974). See also Current Biog., 1941 and 1952; Robert Rosterman, "Judy Garland," Films in Review, April 1962, pp. 209-16; and David Thomson, Biog. Dict. of the Cinema (1975). A bibliography of magazine articles about Garland appears in Mel Schuster, comp., Motion Picture Performers (1971). An obituary appeared in N.Y. Times, June 23, 1969. Birth certificate obtained from Itasca Cty., Minn.; death certificate from General Registry Office, London, England. Assistance was provided by James T. Maher.]

BETH GENNÉ

CAYLE, Newton. See LEE, Muna.

GEIRINGER, Hilda, Sept. 28, 1893—March 22, 1973. Applied mathematician, statistician.

Hilda Geiringer was born to a Jewish family in Vienna, the only daughter of Martha (Wertheimer) and Ludwig Geiringer, who was a textile manufacturer. Her younger brother Karl later became a noted musicologist. Hilda Ceiringer possessed a prodigious memory, especially for mathematical relations, and by the time she was in the gymnasium it was clear that mathematics was her major interest. With her parents' financial support, she went to the University of Vienna where she studied pure mathematics under Wilhelm Wirtinger. In July 1917, she received her Ph.D. on the strength a thesis on double trigonometric series (trigonometrische Doppelreihen), which was published in the following year.

From 1919 to 1920 Geiringer worked under Leon Lichtenstein editing the Fortschritte der Mathematik. In 1921 she went to the University of Berlin where she worked as first assistant ander Richard Martin Edler von Mises at the Institute of Applied Mathematics. The same she married a mathematician, Felix Policek; their daughter, Magda, was born July 6, 1922. They were divorced by 1925, and Geiringer brought up the child herself while she

pursued her professional interests.

The move to Berlin marked a major change: the rest of her life, Geiringer's interests were applied rather than pure mathematics. She the position with von Mises until 1927, she became Privatdozent (lecturer) at the the position of Berlin. There she made significant

contributions to probability theory and also worked on the mathematical development of plasticity theory, which led in 1930 to the fundamental Geiringer equations for plane plastic deformations.

The faculty at Berlin had just proposed Geiringer's nomination as an extraordinary professor when Hitler came to power in 1933. Like other Jewish academics, she lost her job. She left Germany with her child, going first to Belgium, where Geiringer became a research associate at the Institute of Mechanics, and then (1934) to Istanbul University in Turkey where she was professor of mathematics. She remained there until 1939, eventually learning Turkish so she could lecture.

With the outbreak of war, Geiringer was among the Europeans who left Turkey, fearing their refuge was no longer safe. She and her daughter came to the United States. From 1939 to 1944 Geiringer was a lecturer at Bryn Mawr College. (She became a naturalized citizen in 1945.) During the summer of 1942, she was one of a number of distinguished Europeans who taught at Brown University in a program for advanced instruction and research in mechanics.

On Nov. 5, 1943, Hilda Geiringer married Richard von Mises, who had also emigrated to Turkey from Germany and then come to the United States, where he was lecturer on aerodynamics and applied mathematics at Harvard University. She left Bryn Mawr in 1944 to become professor and chairman of the mathematics department at Wheaton College in Norton, Mass., a position she held until her retirement in 1959. During her tenure at Wheaton the department expanded considerably, and a number of her students went on to pursue careers in mathematics. Geiringer lived and worked at Wheaton during the week, coming to Cambridge on weekends to be with her husband who was named Gordon McKay Professor of Aerodynamics and Applied Mathematics at Harvard in 1945.

Despite the difficulties imposed by the war and the demands of her jobs, Geiringer worked steadily on her own research. In 1953 she wrote: "I have to work, scientifically, besides my college work. This is a necessity for me; I never stopped it since my student days, it is the deepest need in my life." Of central importance to her were issues in statistics, especially the mathematical basis of Mendelian genetics. She also continued research in plasticity.

Von Mises died in 1953 and Geiringer felt a strong responsibility to complete his work. From 1954, when she was awarded a grant by the Office of Naval Research and began to work as research fellow in mathematics at Harvard, Geiringer devoted most of her time to finishing von Mises's work and developing her own interests. With Geoffrey S. S. Ludford she finished an incomplete von Mises manuscript that was published in 1958 as Mathematical Theory of Compressible Fluid Flow. She also collaborated with A. M. Freudenthal, and contributed the mathematical part of the article "The Mathematical Theories of the Inelastic Continuum" for the Encyclopedia of Physics (1958).

During the same period, Geiringer turned her attention to the foundations of probability theory. Before leaving Germany, von Mises had developed the view that probability theory was a science based on observable phenomena rather than an extension of mathematical set theory. Geiringer reintroduced this idea in a new edition of von Mises's work, Probability Statistics and Truth (1957). In 1964 she published a revised edition of his Mathematical Theory of Probability and Statistics in which she reworked a number of concepts and, by developing a new mathematical interpretation, removed an inconsistency which had flawed the original presentation. During the 1960s Geiringer lectured frequently and published several articles supporting this controversial view of probability theory.

Hilda Geiringer's work received considerable recognition. In 1960 Wheaton awarded her an honorary degree. The University of Berlin elected her professor emeritus with full salary in 1956, and in 1967, the fiftieth jubilee of her graduation, she was given a special presentation by the University of Vienna. She was also a member of Sigma Xi and a fellow of the American Academy of Arts and Sciences.

Geiringer's range of interests, noticeable in the breadth of her professional work, also extended beyond the field of mathematics. She was an avid mountain climber, and had an impressive knowledge of literature, poetry, and classical music. She died in 1973 of influenzal pneumonia in Santa Barbara, Calif., while visiting her brother.

[Hilda Geiringer's papers in the Harvard Univ. Archives include a bibliography of her published work, correspondence 1944–73, manuscripts, speeches, notebooks, and lecture notes. The Schlesinger Library, Radcliffe College, has the German text of a speech delivered when she was honored in Vienna in 1967; it contains an invaluable description of her mathematical contributions. There are partial lists of Geiringer's publications in J. C. Poggendorff, Biographisch-literarisches Handworterbuch der exakten Naturwissenschaften, 1923–1931, ser. 6, vol. 2, p. 865, and 1932–1953, ser. 7a, vol. 2,

pp. 179-80. A brief article about her is in the Wheaton Newsletter, Sept. 1959. The program in which she participated at Brown is described in Dean R. G. D. Richardson, "Advanced Instruction and Research in Mechanics," Am. Jour. of Physics, 1943, pp. 67-73, and in a pamphlet "Applied Mathematics at Brown: A Description and History of the Division of Applied Mathematics at Brown University on the Occasion of its 25th Anniversary Celebration. September 7-10, 1971." Background about the scientific immigration to the United States is given in Laura Fermi, Illustrious Immigrants (1968) and in Donald Fleming and Bernard Bailyn, eds., The Intellectual Migration: Europe and America, 1930-1960 (1969). Obituaries appeared in Boston Sunday Globe, March 25, 1973, and the N.Y. Times. March 24, 1973. Additional information was provided by Geiringer's daughter, Magda Tisza, her brother, Karl Geiringer, and her colleague Geoffrey S. S. Ludford. A birth certificate was provided by the Israelitische Kultusgemeinde Wien, Vienna, Austria; death record from Calif. Dept. of Public Health.]

JOAN L. RICHARDS

GELLHORN, Edna Fischel, Dec. 18, 1878-Sept. 24, 1970. Community leader, suffragist.

Edna Fischel Gellhorn, best known for her work with the League of Women Voters, was born in St. Louis, the only daughter and eldest of four children of Washington Emil and Martha (Ellis) Fischel. Her inspired career in public service benefited from the encouragement and example provided by her parents, both leaders in the Ethical Culture Society. Her father, a native St. Louisan whose ancestors came from Prague, was a prominent physician and professor of clinical medicine at Washington University. A founder and president of the medical staff of the Barnard Free Skin and Cancer Hospital, Washington Fischel was respected for his dedication to his patients, both rich and poor. Martha Fischel, a descendant of early English settlers, moved to St. Louis as a child from her native Mississippi. An educator and civic worker before her marriage, she led the movement to provide homemaking and manual training for St. Louis youngsters, and in 1908 was named director of the St. Louis School of Philanthropy (later the George Warren Brown School of Social Work at Washington University).

Edna Fischel attended Mary Institute, graduating as class president in 1896, and briefly attended the Baldwin School in Bryn Mawr, Pa. She received an A.B. in 1900 from Bryn Mawr College. A popular student, she was chosen lifetime president of her class; she later served as an elected trustee of the college.

On Oct. 21, 1903, Edna Fischel married

find Sent. 54 Newsletter story

### One of Wheaten's most distingusihed

One of Wheaton's most distinguished faculty
members retired in June. Dr. Hilda Geiringer, who
came to the College in 1944, has been named
Professor of Mathematics, Emeritus.

A graduate of the University of Vienna, where she received her doctorate, Dr. Geiringer came to this country in 1939. During the War she taught at Bryn Mawr and Swarthmere Colleges and did classified research work for the National Defense Research Council.

Through the years she has published more than 80 articles and several books in pure and applied mathematics. Recently x she x several kernedx She is the co-author of a recent, comprehensive article on "The Mathematical Theories of the Inelastic Continuum, publishess which has been included in the Encyclopedia of Physics.

After the deather of her husband, Dr. Richard von Mises, Gordon MacKay Professor, Applied Mathematics and Aerodynamics at Harvard University, she started completing and revising his various posthumous works. This task is not yet completed.

At Wheaton, Professor Geiringer, who is a Fellow of the Institute of Mathematical Statistics and of the American Academy of Arts and Science, taught courses in Probability, Vector Calculus, Advanced Calculus, and statistics. Dr. Geiringer xxx says that she particularly enjoyed teaching the introductory course on xxx elementary mathematics.

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Dr. Geiringer intends to continue her work in mathematics while living in Cambridge and working at Harvard.

7/20/59

final draft for Newsletter story.

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