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**FIELDS INSTITUTE** Research in Mathematical Science

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## CELEBRATING WOMEN IN MATHEMATICS

### CATHLEEN SYNGE MORAWETZ

1923- , Canada - In her undergraduate years at Toronto during World War II, Cathleen undertook war work in 1943-44 as a technical assistant. Returning to the University of Toronto, she was awarded her B.A. degree in Mathematics in 1945. Cecilia Krieger, who taught Cathleen mathematics while she was an undergraduate, had been a family friend for many years. She strongly encouraged Cathleen to continue her study of mathematics.



Cathleen married Herbert Morawetz, a chemist, in 1945. She then went to Massachusetts Institute of Technology to study for her Master's Degree which she received in 1946.

She wrote her doctoral thesis on the stability of a spherical implosion and was awarded a Ph.D. in 1951. She was assistant professor at the Courant Institute of Mathematical Sciences in 1957, an associate professor in 1960, and then became a full professor in 1965. In 1966-67 she held a prestigious Guggenheim Fellowship.

In 1978, Morawetz became the Associate Director of the Courant Institute of Mathematical Sciences at New York University, a position which she held until 1984 when she was appointed Director. She was the first woman to hold this position – moreover she was the first woman to hold any comparable directorship within the mathematical sciences in the United States. She was elected President of the American Mathematical Society, serving in this role in 1995-96.

Among her many honours, she is a member of the National Academy of Sciences and a recipient of the Presidential Medal of Science.

*Biography courtesy of The MacTutor History of Mathematics archive*