

EARLY, Madeline (Levin). April 1, 1912–January 20, 2001.

HUNTER COLLEGE (BA 1932), BRYN MAWR COLLEGE (MA 1933, PhD 1936), NEW YORK UNIVERSITY (BELLEVUE SCHOOLS OF NURSING) (BS 1945).

Madeline Levin was born in Brooklyn, New York, the youngest child of Dora (Siegal) (1875–1962) and Hyman Levin (1870–1936). Both of her parents were born in Grodno, Russia (Lithuania), and emigrated from there in the early 1890s. They married in 1892 and had seven children: Mitchell Julius (1893–1958), Bertha (1895–1978), Rose (1897–1973), Anne (1902–1996), Florence (1905–1990), Harold (1909–1999), and Madeline. In January 1920, the family household in Brooklyn contained her parents, naturalized in 1898, and the five younger children. Her father’s occupation was listed as house painter.

Madeline Levin attended public schools in New York City for her primary, secondary, and collegiate education. She attended Hunter College as a scholar of the University of the State of New York before graduating magna cum laude as a mathematics major at age twenty. While at Hunter she was a member of Pi Mu Epsilon; Theta Mu Tau, a physics honorary society; and the mathematics club. She also served as an officer, frequently treasurer, in various other college clubs. According to Ann Early, her daughter-in-law, she credited Lao Genevra Simons, chairman of the Hunter mathematics department when she was there, as the one “who sponsored [her] career.”

After her graduation in 1932, Levin went immediately to graduate school at Bryn Mawr College. She was a college scholar 1932–34 and a college fellow in the fall of 1934. A paper in algebraic topology coauthored by Levin and William W. Flexner, her advisor at Bryn Mawr, appeared in 1934. Flexner joined the faculty at Cornell University in 1934, and Levin spent the spring semester of 1935 at Cornell as a fellow from Bryn Mawr. She received a master’s degree in 1933 and her doctorate in 1936 from Bryn Mawr.

In the fall of 1935, at age twenty-three and a year before completing the work for her doctorate, Levin joined the faculty of her alma mater, Hunter College, as tutor. She remained as tutor through 1938, and then was appointed instructor. It was a lonely time because of the heavy work load and because she was so much younger than the other faculty. She did post-doctoral study at the University of Chicago in the summers of 1937 and 1938. From her initial appointment at Hunter through early 1942, Levin regularly attended meetings of the AMS in New York City.

During the early years of World War II, Levin took a military leave of absence to attend the Bellevue Schools of Nursing and to take additional course work to earn a bachelor’s degree in nursing from the affiliated New York University. She was appointed ensign in the Naval Reserve in March 1945 and in April was directed to the US Naval Hospital, St. Albans, on Long Island. The following year she was transferred to Guam, where she served for nearly a year before being released from active duty in March 1947. Then, using the GI Bill, Levin did post-doctoral study at the University of Michigan during 1947–48. It was there, in October 1947, that she met Harold C. Early (1912–2000), a native of Michigan who had graduated from Michigan State University in 1939 with a major in mathematics and who later did graduate work at the University of Michigan. During World War II, he was part of a

team at Harvard that developed a device for jamming enemy radar. After the war, he was a member of the electrical engineering faculty at the University of Michigan.

Levin returned to Hunter in 1948 but formally resigned her position as instructor in February 1949. She married Harold Early on April 8, 1949, and moved back to Ann Arbor, Michigan. The Earlys had one child, Robert Eric, born in July 1951. They divorced in July 1958.

In 1956 Madeline Early joined the faculty of Eastern Michigan University in nearby Ypsilanti, where she taught for the next nineteen years. She was assistant professor 1956–59, associate professor 1959–67, and professor from 1967 until her retirement in 1975, when she became professor emeritus. In addition to her work on various department, college, and university committees, she served as associate head of the department for some time. A letter at the time of her retirement indicates how well she was thought of at Eastern Michigan. Her daughter-in-law noted that Early “was an extremely dedicated and responsible teacher with a strong commitment not to miss class. She passed this on to Bob [her son, a mathematics professor]. They would joke that she would arrange not to die during the school year, so that he wouldn’t have to miss [class].” Ann Early also said that her mother-in-law was “very precise in her diction and habits. She kept everything she could very orderly. She could be very intense On the other hand, she had a wry sense of humor and enjoyed being teased.”

In the late 1970s, Early sold her house in Ann Arbor and moved into an apartment at the Glacier Hills retirement community, also in Ann Arbor. She stayed active and took a group trip once or twice a year until she was in her eighties. Madeline Early died in 2001 at age eighty-eight at St. Joseph Mercy Hospital in Ann Arbor, after having been a resident of Glacier Hills Nursing Center. She was survived by her son, daughter-in-law, and grandson and was buried at Fort Custer National Cemetery in Augusta, Michigan.

Organizational affiliations: AMS, AAUP, Phi Beta Kappa, Pi Mu Epsilon.

Dissertation:

1936 [Levin, M.] An extension of the Lefschetz intersection theory. PhD dissertation, Bryn Mawr College, directed by William Welch Flexner. Printed version, 1937, Lima, Peru, reprinted from *Rev. Cienc. (Univ. Nac. Mayor San Marcos, Lima)* 39:93–118.

Publications:

1934 [Levin, M.] with W. W. Flexner. The intersection of arbitrary chains and its boundary. *Proc. Natl. Acad. Sci. USA* 20:666–68. Reviews: *JFM* 60.0515.01 (E. Pannwitz); *Zbl* 010.37603 (H. Seifert).

1937 [Levin, M.] An extension of the Lefschetz intersection theory. *Rev. Cienc. (Univ. Nac. Mayor San Marcos, Lima)* 39:93–118. Published version of PhD dissertation. Reviews: *JFM* 64.1280.04 (E. Schulenberg); *Zbl* 018.27803 (A. W. Tucker).

References to: WhoAmW 8–9.

“Early, Madeline (Levin) [of] Ann Arbor, MI.” (Obituary) *Ann Arbor News*, 23 Jan 2001.

Other sources: Owens questionnaires 1937, 1940; correspondence with Robert and Ann Early, 1999–2002; Cornell University Department of Mathematics files; US Census 1910, 1920, 1930 NY; SSDI.