

McDONALD, Emma (Whiton). August 3, 1886–July 7, 1948.

COLORADO COLLEGE (BA 1909), UNIVERSITY OF CALIFORNIA (MA 1916, PhD 1932).

Emma Kirtland Whiton was born in Brooklyn, New York, the daughter of Ella E. (Lewis) (b. 1851) and Erastus T. Whiton (b. 1849), both originally of Connecticut. In 1900 the family was living in Pueblo, Colorado, her parents had been married twenty-three years, and two children were living of three born. Emma Kirtland's older sister was Myra Eleanor (b. 1882), who was also born in New York; their father was an undertaker.

Emma Whiton graduated from Centennial High School in Pueblo, Colorado, in 1904. It appears that she taught for a year there before entering Colorado College in Colorado Springs, where she earned her bachelor's degree cum laude in 1909. Florian Cajori was the head professor of mathematics there at that time. While at Colorado College, her activities included Hypatia (a literary and social club), the Dramatic Society, Dais, the YWCA, and the YWCA cabinet. After her graduation, she returned to Centennial High School, where she taught history 1909–11 and then mathematics until about 1916. She is listed in all of the school yearbooks 1909–1916 except for the year 1914–15. She is listed as being at a high school in Pueblo in the April 1916 list of charter members of the MAA. The membership list published later that year lists her as a graduate student at the University of California living in a hotel in Berkeley. Her master's thesis, written under the direction of J. H. McDonald, was completed and approved by December 1916. Whiton was in residence at the university 1916–17 and the first semester 1917–18, when she was a PhD candidate in mathematics.

Whiton was professor of mathematics at the University of Redlands in southern California from January 1918 until 1923, when she joined the faculty as associate professor at Mills College. She was at Mills a year and a half before resigning in January 1925. She and her master's thesis advisor, John Hector McDonald (1874–1953), had married on December 19, 1924, when she was head resident of Mills Hall and on the faculty at Mills. J. H. McDonald was born in Toronto, Ontario, Canada, earned his PhD as a student of Oskar Bolza at the University of Chicago in 1900, and joined the faculty at California in January 1902.

In May 1932 Emma Whiton McDonald took her final exam for her PhD at the University of California. Her dissertation in number theory was directed by D. N. Lehmer, and her minor subject was astronomy.

Emma Whiton McDonald used the name Mrs. J. H. McDonald in MAA membership lists in the late 1920s. She used Mrs. Kirtland McDonald in the 1933–34 membership list and published her dissertation in 1934 under the name Kirtland McDonald. It appears that she and J. H. McDonald were living separately by 1930 and at some point were divorced. In 1944 he married Sophia Levy, a member of the mathematics faculty at Berkeley who had a PhD in astronomy.

The last entries in MAA directories for Mrs. Kirtland McDonald are in 1933–34 at a hotel in Los Angeles and in 1935–36 with her address unknown. No record of further professional activity in mathematics has been found, although she worked for some years as a real estate broker in southern California. She lived in San Marino and in South Pasadena. She was a member of the Daughters of the American Revolution.

Emma Kirtland McDonald had been living in South Pasadena, California, for seven years before her death there from cancer at age sixty-one in 1948. She was cremated and her ashes were interred at Forest Lawn Memorial Park in Glendale, California.

Organizational affiliations: AMS, MAA (charter member).

Thesis and dissertation:

1916 [Whiton, E. K.] On the fixed centrode of three-bar motion. MA thesis, University of California, directed by John Hector McDonald. Typescript.

1932 Magic cubes which are uniform step cubes. PhD dissertation, University of California, directed by Derrick Norman Lehmer. Typescript. Printed version, 1934, reprint of *Univ. California Publ. Math.* 2:197–215.

Publications:

1926 Determination of the reducible cases of the fixed centrode of three-bar motion. *Amer. Math. Monthly* 33:90–93.

1934 Magic cubes which are uniform step cubes. *Univ. California Publ. Math.* 2:197–215. Published version of PhD dissertation. Reviews: *JFM* 60.0876.02 (F. Behrend); *Zbl* 009.29703 (N. G. W. H. Beeger).

Abstract not listed above:

1931 Magic cubes which are uniform step cubes. *Bull. Amer. Math. Soc.* 37:354 #230. Presented by title to the AMS, Seattle, WA, 13 Jun 1931.

References to:

“Head Resident at Mills Weds U.C. Professor of Mathematics.” *Oakland Tribune*, 19 Dec 1924.

“McDonald – Mrs. Kirtland W. McDonald.” (Obituary) *Pasadena Star-News*, 8 Jul 1948.

Other sources: University of California Archives; communications with Colorado College Archives, Centennial High School (Pueblo, CO) researcher, Pasadena Public Library, and University of Redlands Archives; University of California: In Memoriam, [1957], 98–100 (McDonald, John Hector); US Census 1880 NY, 1900, 1910, 1920 CO, 1920 CA, 1930 CA; California death certificate.

Last modified: December 12, 2008.