

Garrett Birkhoff

Born January 10, 1911, Princeton, N.J.; noted for significant research in computational mathematics related to fluid mechanics and nuclear reactor theory.



Education: AB, Harvard University, 1932.

Professional Experience: Harvard University: junior fellow, Harvard Society of Fellows, 1933-1936, faculty member, 1936-1969, George Putnam Professor of Pure and Applied Mathematics, 1969-1981; professor emeritus, 1981-present, visiting lecturer, Universidad Nacional de Mexico, 1945, 1958; Walker-Ames Lecturer, University of Washington, 1947; Taft Lecturer, University of Cincinnati, 1947; Fairchild Distinguished Scholar, California Institute of Technology, 1981; ONR Visiting Research Professor, Naval Postgraduate School, 1984.

Society Positions: president, Society for Industrial and Applied Mathematics (SIAM); chairman, Conference Board of the Mathematical Sciences; vice president, American Mathematical Society (AMS); vice president, American Academy of Arts and Sciences; vice president, Mathematical Association of America (MAA); chairman, Section A, American Association for the Advancement of Science (AAAS), 1979.

Honors and Awards: member, American Philosophical Society; member, National Academy of Sciences; honorary degrees from Universidad Nacional de Mexico, University of Lille (France), Case Institute of Technology, Technische Universität of Munich, Technische Hochschule (Darmstadt, Germany); Guggenheim Fellow, 1948; George D. Birkhoff Prize, American Mathematical Society, 1978; von Neumann Lecturer, SIAM, 1981.

BIBLIOGRAPHY

Biographical

Birkhoff, Garrett, "Computing Developments 1935-1955, as Seen from Cambridge, USA," in Metropolis, N., J. Howlett, and Gian-Carlo Rota, *A History of Computing in the Twentieth Century*, Academic Press, New York, 1980, pp. 21-30.

Birkhoff, Garrett, "Fluid Dynamics, Reactor Computations, and Surface Representation," in Nash, Stephen. G., *A History of Scientific Computing*, ACM Press History Series, 1990, pp. 63-87.

Significant Publications

Birkhoff, Garrett, "Mathematics and Psychology," *SIAM Rev.*, Vol. 10, 1969.

Birkhoff, Garrett, "Numerical Fluid Dynamics," *SIAM Rev.*, Vol. 25, 1983.

Birkhoff, Garrett, "Mathematics and Computer Science," *American Scientist*, Vol. 63, 1975.

Birkhoff, Garrett, "Applied Mathematics and Its Future," in Thomson, Robb W., ed., *Science and Technology in America*, National Bureau of Standards Publ. #465, 1977.

Birkhoff, Garrett, and Robert E. Lynch, *Numerical Solution of Elliptical Problems*, *SIAM Publications*, 1984.

UPDATES

Garrett Birkhoff died November 22, 1996 (MRW, 2012). Portrait inserted MRW, 2012.