

# **Don Aronson**



**October 2, 1929 -  
April 17, 2019**



## **In Memoriam**

### **Don Aronson**

**Friday, Month day, 2019  
Vincent Hall Library (3rd Floor)  
East Bank**

Don Aronson was born on October 2, 1929, in Jersey City, NJ. He often described Jersey City as a rough and tumble suburb of New York, and delighted in perpetuating the reputation that it was run by thugs. In spite of his humble beginning, or perhaps because of it, he went on to receive all his degrees — BS, MS, and PhD — from the Massachusetts Institute of Technology, earning the last one in 1956. In 1954, while still a graduate student, he got a summer job as Scientific Officer at the National Research Development Council (NRDC) in London, England. There he programmed the Alan Turing designed Ferranti Mark I computer, the world’s first supercomputer.

His first job was with the Digital Computer Lab at the University of Illinois. In 1956, he moved to the University of Minnesota, was Assistant Professor from 1958 to 1962, and was promoted to Full Professor in 1965, a mere seven years since his initial tenure-track appointment.

Don has 91 publications listed in MathSciNet in several areas of partial differential equations and nonlinear dynamics, including nonlinear diffusion, analytical and computational study of bifurcations, pattern formation, mathematical ecology, and mathematical biology. His two most highly cited works, continuing to this day, are with another former colleague, Hans Weinberger, on nonlinear diffusion in population genetics, combustion, and nerve pulse propagation. Don was the principal lecturer in a CBMS Conference at the University of Houston in 1976, and wrote a very influential monograph “The Porous Medium Equation”. Don had over 40 co-authors, consistent with his idea that mathematics research as a “team sport”. Indeed, life-long friendships resulted from many of these collaborations. In June 2001, a conference, entitled “Nonlinear Phenomena in Science”, was held at the Free University of Amsterdam to honor Don on the occasion of his 70th birthday. In 2013 Don was elected to the Inaugural Class of Fellows of the American Mathematical Society. His place in mathematics is secured. Don retired in June 2002. Shortly thereafter, he joined the IMA as their first Director of the Postdoctoral Program. He stayed in this role until 2010.

Don passed away on April 17, 2019. Beloved for his collegiality and his sense of humor, Don was a font of departmental history, especially about its early years. He read and traveled widely; his knowledge of history, the arts, and literature was remarkable. He was a music lover who went to hear live performances whenever he could. He was also an extraordinary gourmand, a food adventurer who thoroughly enjoyed dining. He will be missed for his quick quips, which he dispatched with an endearing twinkle. With his passing, the department has lost a very dear friend and colleague.

# **Don Aronson Memorial Program**

Welcome and Opening Remarks.....Peter Olver

### **Speakers:**

Fadil Santosa

Dick McGehee

Arnd Scheel

Hans Othmer

Cheri Shakiban

Laura Thrane

Rebecca Aronson

Cellist: Omar Macias