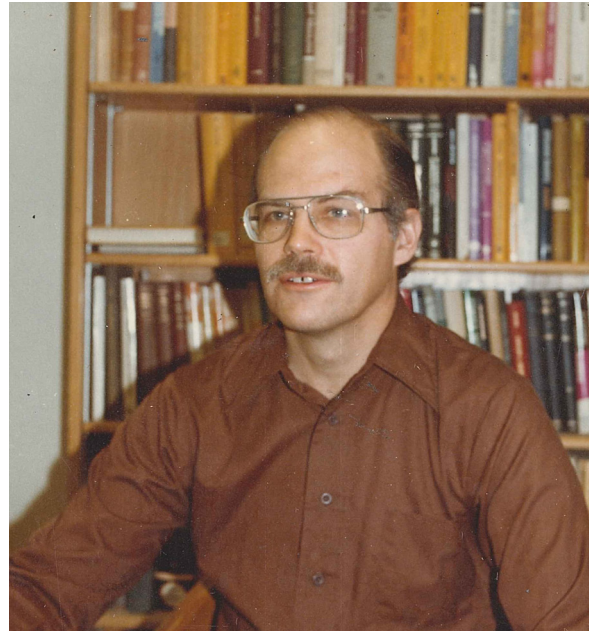# JOHN BROTHERS

John Brothers, professor of mathematics at Indiana University from 1966 to 2002, began his mathematical career in Utah, earning both his B.S. and M.S. degrees from the University of Utah. In 1960, he moved east to pursue the PhD at Brown University, where he wrote a dissertation under Herbert Federer, one of the giants and founders of modern geometric measure theory. While at Brown, Brothers also read the manuscript of Professor Wendell Fleming's 1965 text, *Functions of Several Variables.* Fleming credits him with many valuable suggestions, and the text, widely used ever since, is still in print.

After earning the PhD in 1964, John served in the U.S. Army for two years before joining the Mathematics Department at IU. Except for a one-year visit to the Institute of Advanced Studies in 1973-74, John did all his research, teaching, and a considerable amount of service at Indiana University.

John's research focused on the consequences of symmetry in minimal surfaces, rectifiable currents, tangent cones and other objects studied within geometric measure theory. His interests overlapped extensively with those of Professor William P. Ziemer, another Brown University alum and a good friend. Besides collaborating on several research projects, they ran an analysis seminar together, and oversaw the Indiana University Mathematics Journal for more than two decades. John served as Managing Editor for the Journal from 1981 to 1990. During the 1970's and 80's, he also directed four graduate students successfully toward their doctorates in geometry.

While most research happens behind closed doors, teaching activities are much more visible, and especially so in John's case: he felt very strongly about undergraduate education. His legacy in that regard is ubiquitous, for John was Director of Undergraduate Studies several times, Director of Graduate Studies, and MAT advisor (Masters in Teaching program) for many years. He also served on dozens of committees regarding curriculum, textbooks, and so forth. John established an examination center for the Society of Actuaries at the Math Department, and he himself conducted review sessions for the exams. John's office seemed always to be filled with students.

Born: Salt Lake City, Utah July 6, 1937
Died: New Bedford, Massachusetts November 15, 2010
Years at IU: 1966-2002