

MEMORIAL RESOLUTION

Robert Thomas Glassey

1946-2020

Bob Glassey was born on January 12th, 1946, in Long Branch, New Jersey to Mary (Pearsall) and Thomas Glassey. He graduated from Franklin and Marshall College in 1968 and received his Ph.D. in applied mathematics from Brown University in 1972.

Bob joined the math department at Indiana University in 1972. For the next 37 years, he was a mainstay of the group in partial differential equations (PDE), rising quickly to the ranks of associate and full professor.

Bob's thesis advisor at Brown, Walter Strauss, inspired in Bob a keen interest in the study of nonlinear wave equations. Accordingly, a big part of Bob's early career research focused on nonlinear wave equations and nonlinear Schrodinger equations. Later in his career, Bob shifted his focus to the notoriously difficult Vlasov-Maxwell system of PDE, a model for the behavior of charged components in plasma. In both areas, he emerged as one of the most highly regarded researchers in the world, producing over 60 articles in top journals. He also wrote two books, one on kinetic theory and one on numerical computation using C.

Bob was a giant in the world of PDE. His landmark 1977 paper showing that solutions to one of the most important PDEs, the nonlinear Schrodinger equation, could 'blow-up,' that is, could become infinite in a finite amount of time, stands to this day as a prototype for this kind of result in the field. In recognition of his status as an international leader, Bob was elected as a member of the inaugural class of Fellows of the American Math Society in 2012.

During his four decades in our department, Bob served as graduate director, managing editor of the IU Math Journal and chaired the department in the mid-1990s. In the classroom, Bob taught the full range of courses during his time at IU, from freshman calculus up through advanced graduate courses in nonlinear PDE. He also directed nine Ph.D. students during his career.

Bob was always self-effacing with his colleagues, and to those who worked with him or studied under him, he was tough, clear, doggedly determined, but also warm, utterly unpretentious and unfailingly kind.

Outside of mathematics, Bob had wide interests, including tennis, racquetball, golf, and bike riding. He loved both playing and listening to music and was an avid reader. To his wife Betsy and children Tom and Molly, he was a loving and devoted husband and father. He will be missed by all of us.

Peter Sternberg

Professor of Mathematics

Indiana University Bloomington