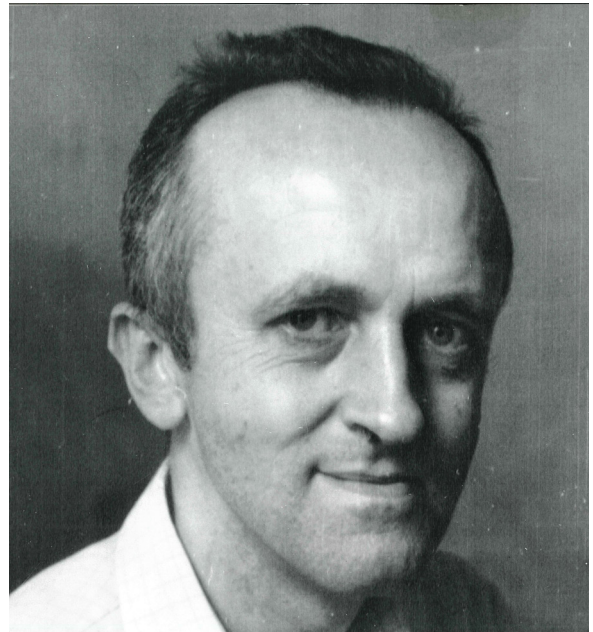


JAN JAWOROWSKI

In 1964, Jan Jaworowski left his home in Poland, where he had established himself as a leading mathematician, to move to the United States. After academic visits to Oxford University, the Institute for Advanced Studies at Princeton, Cambridge University, and the University of Chicago, and an appointment as an Associate Professor at Cornell University, Jan arrived in Bloomington where he spent the remainder of his long and productive career, residing here for 48 years.

Much of Jan's research centered around generalizations of the Borsuk-Ulam theorem, named for his thesis advisor and collaborator. These generalizations are deep and theoretical, but the fundamental result is a favorite in mathematics because of its easily stated and unintuitive consequence. At every point on the Earth, one can measure the temperature and humidity. According to the Borsuk-Ulam theorem, there exists at every moment some pair of opposite points on the globe with the same temperature and with the same humidity. Jan's work revealed that this theorem is simply the first case in an array of results, unconstrained by the limitations of a three-dimensional universe. Jan's contributions in this direction used the techniques of algebraic topology.

Another theme in Jan's work was symmetry. The symmetry of a sphere is the starting point of the mathematical study of symmetry in general. Among Jan's most notable contributions in this study is his proof, announced in the Bulletin of the American Mathematical Society in 1972, titled "Extensions of maps in spaces with periodic homeomorphisms," that when one space is contained in another (like the surface of the sphere is contained in three dimensional space), symmetries of the smaller space are reflected in the symmetries of their neighborhoods on the larger space. Jan's contributions in this direction used the techniques of geometric topology.



Jan published 64 papers written over a span of 57 years, including 12 papers in retirement. His first paper, in the important journal *Fundamenta Mathematicae*, appeared in 1952 and his last paper appeared in 2009 in the *Journal of Fixed Point Theory and Applications*. Following Jan's retirement, mathematicians continued to visit Bloomington from around the world to learn from his insights. Jan presented elegant and polished lectures in seminars at IU and at leading research centers in many European countries, and in Korea, Taiwan, New Zealand, and Australia.

An exemplary and well-loved teacher, Jan especially enjoyed working with graduate students. He guided 12 graduate students through a PhD dissertation, and has 17 academic descendants. Known to his undergraduate students as "Dr. J," he taught clearly and effectively at every level.

Born: Augustow, Poland March 2, 1928
Died: Bloomington, Indiana April 10, 2013
Years at IU: 1965-1995

See also the Jan Jaworowski Papers at the Indiana University Archives