

## Andrzej Jankowski (1938-1975)



Andrzej Jankowski was born on April 20, 1939 in Torun. His father Edward Jankowski was arrested by gestapo in 1942 in Warsaw, and was killed in Sachsenhausen-Oranienburg at the beginning of 1945. After the war Mrs. Jankowska moved with his son to Gdansk.

In 1955 Andrzej graduated from the Gdansk Secondary School of Shipping Industry and began to study mathematics at Mikołaj Kopernik University in Torun. In June 1960 he received his Master's Degree, and in the same year started to work as an assistant in the Mathematical Seminar at Torun University. He was interested in the foundations of geometry, and started writing and publishing on this topic while still a student.

The end of the 1950s and the beginning of the 1960s was a time of great successes in algebraic and differential topology. The answers to many classical problems were found at this time. In work by J. Milnor, S. Smale, and J. F. Adams the method of algebraic topology proved its strength and effectiveness. That was the direction in which Andrzej's interests evolved at the time of his studies. This wasn't easy! In Poland there was actually no tradition of algebraic and differential topology. In the beginning Andrzej participated in the seminar on topology and homological algebra carried out by A. Granas at Torun University. At that time he wrote with with A. Granas and K. Geba a study in infinite dimensional topology.

On October 1, 1962 Andrzej moved to Warsaw University where he started working as senior assistant. His Doctor's Degree dealt with algebraic topology, particularly homotopy theory. In June 1966 he defended his doctoral thesis "On Homotopy Classifications of Maps", in which he constructed an obstruction theory to the extension of maps dual to the standard obstruction theory based on the Moore-Postnikov decomposition. Jankowski's theory was based on the Eckmann-Hilton homological decomposition of maps. The summary of that study was later published.

In October 1966 Jankowski was appointed a lecturer in the Topology faculty of Warsaw University. In the academic year 1966-67 apart from classes he carried out a seminar on the foundations algebraic topology and delivered a lecture course on homological algebra within the Interschool Council of Mathematics programme. In that way he started his work with the aim of attracting students to algebraic topology and founding a group actively dealing with it. The seminar was continued in subsequent semesters, and he carried on with lectures within the Council.

His work was supported by others. In 1967 Polish Seminar of Algebraic Topology, run by A. Granas, started its activity. That same year the 1st Summer School of Algebraic Topology was held in Sopot, organized by A. Granas and K. Geba.

In the following years further schools of this kind would be organized with an increasing group of students and the participation of foreign mathematicians. At that time Andrzej Jankowski was already working at the Branch of Mathematics Institute of Polish Academy of Sciences in Sopot. He also participated in the works of a Polish seminar and was one of the lecturers during the first summer school. Since then he gave lectures at the all successive ones and finally he took the responsibility of their organization and supervision.

In the years 1966-1970 homotopy theory was still dominant in Andrzej's research. This was extended by research in the field of the theory of differential topology and especially the theory of bordism especially. In February 1969 Andrzej moved from the Warsaw University to the Institute of Mathematics of Polish Academy of Sciences where he took up the position of a lecturer. From Autumn 1969 onwards he organized the seminar in differential topology for the staff of the Institute,

the University and the postgraduates. The actions of compact Lie groups on manifolds were chosen as the major subject of his seminar. For the following years that subject was dominant in the works of the students, assistants and postgraduates who gathered around him.

In the years 1970-1971 he worked on "Algebras of the cohomology operations in some cohomology theories". In August 1971 it was published as Preprint no 19 of the Mathematics Institute of the Polish Academy of Sciences which became his Habilitation Thesis later in June 1972.

In December 1970 Andrzej left for Moscow to stay for a year. He worked there with S. P. Novikov, A. S. Mishchenko, V. M. Buchstaber and others. After his return to Poland he moved to Gdansk where he worked at a branch of Mathematics Institute of Polish Academy of Sciences. He organized a seminar and delivered lectures in algebraic topology designed for postgraduates and the younger staff. At the same time he lectured on topology and differential geometry at the newly founded University of Gdansk. The works prepared in the years 1971-1973 were awarded the S. Zaremba Prize of the Polish Mathematical Society in 1974. In February 1975 he stayed for a month at Oxford University as the fellow of International Mathematical Union. He delivered lectures at Oxford University as well as at Universities of Cambridge, London, Warwick and Manchester.

In August 1975, at the age of 36, Andrzej Jankowski took part in a high mountain expedition in the Hindukush from which he never came back. He was buried on the 7000m high plateau of the massif Tirich Mir.

Since 1999 Institute of Mathematics of the University of Gdańsk and the Gdańsk Branch of the Mathematical Institute Polish Academy of Sciences organize Andrzej Jankowski memorial lectures every year. The lectures are given by remarkable mathematicians, including Fields' medalists. The list of the lectures can be found on the webpage <http://mat.ug.edu.pl/ajml/>.