



**Nikolay Viktorovich Azbelev**

(1922–2006)

Professor Nikolay Viktorovich Azbelev, a well-known Russian mathematician, died on November 3, 2006.

Nikolay Azbelev was born on April 15, 1922 in selo (small village) Bazlovo, Pskov Region, Russia, in the family of a physician. In 1941 N. V. Azbelev entered the Moscow State University (MSU). His studies at the Faculty of Mechanics and Mathematics of MSU were interrupted because of his military service in the Soviet Army (World War II). In 1945 he entered the Moscow Aviation Institute, from which he graduated in 1949 with the degree in engineering. In 1954 Azbelev defended his Candidate of Sciences Thesis in Mathematics at the MSU. The same year he left Moscow for Izhevsk to head the Higher Mathematics Department at the Izhevsk Mechanical Institute (IMI). Here he wrote his Doctor's Thesis in Mathematics, which he defended in 1962 at the Kazan State University. In 1963 he was granted the title of professor. In the period 1966–75 Azbelev worked as the head of the Higher Mathematics Department at the Tambov Institute for Chemical Engineering. In 1975 he moved to the Perm Polytechnical Institute (PPI)

where he founded the Department of Mathematical Analysis. Azbelev's scientific expertise and leadership contributed immensely to the development of this department to the extent that it has become one of the well known mathematical centers and the core of the Perm Seminar on Functional Differential Equations. Since 1994 to his last day N. Azbelev was the head of the Research Center for Functional Differential Equations at the Perm State Technical University (former PPI).

Nikolay Azbelev's research works cover integral, differential and functional differential equations and inequalities, numerical methods, stability theory, boundary value problems and calculus of variations. He is one of the founders of the Russian scientific school on differential and integral inequalities. In his first papers N. Azbelev gave a solution to the Chaplygin problem on the boundaries of feasibility of the differential inequality theorem. These works essentially expanded the area of applications of differential inequalities. The activity of Azbelev and his Tambov Seminar implied the creation of a theory of differential equations with deviating argument. This theory became a basis of the contemporary Theory of Functional Differential Equations which was worked out by the members of the Perm Seminar under the leadership of Azbelev. In 1991 the Publishing House Nauka, Moscow, published the book of N. Azbelev (with coauthors) "Introduction to the Theory of Functional Differential Equations". It can be told that up to now this monograph remains a reference book for specialists in the theory of FDE. The further development of the FDE theory was treated thoroughly in eight books, four of them in English. On his last day N. Azbelev dealt with the galley proof of the new book. Now this theory covers many classes of equations containing the ordinary derivatives of the solution function. Of special importance are the contributions of N. Azbelev to creation and development of the theory of Abstract FDE, an essential further generalization of the equations with ordinary derivatives, covering wide classes of  $n$ -th order FDEs, systems with impulses, singular equations. N. Azbelev's influence was not limited to the original and fundamental contributions he made to the theory of integral and functional differential equations. An invariable feature of N. Azbelev's activity was his ability to unite around himself colleagues and all the enthusiastic about Science. He significantly contributed to the education of young mathematicians, supervised over 60 Candidates and 10 Doctors of Sciences. N. Azbelev was a member of editorial boards of "Differentsial'nye Uravneniya" (for more than 25 years), "Nonlinear Dynamics and System Theory", "Memoirs on Differential Equations and Mathematical Physics", "Functional Differential Equations" and many others.

Professor Azbelev received many honors and awards over the course of his career. He was awarded orders and medals, recognized as a Meritorius Science Worker of the Russian Federation, awarded the Grant of the Russian Federation President for Leading Scientists, selected by the International Soros Science Education Program as a George Soros Emeritus Professor,

conferred the title of Honored member of the Academy of Nonlinear Sciences.

The demise of Professor Azbelev is a great loss to mathematical community not only of Russia but also of the world. This is evidenced by the messages from abroad received by his family in the days close after his death. The blessed memory of N. Azbelev will forever live in the minds and the hearts of his colleagues, friends and his pupils continuing the cause to which Nikolay Azbelev devoted his life.

N. IZOBV, I. KIGURADZE, G. KVNIKADZE,  
A. LOMTATIDZE, V. MAKSIMOV, N. ROZOV, M. TVRDY