

THE MATHEMATICAL INSTITUTE OF THE ACADEMY
OF SCIENCES OF THE CZECH REPUBLIC
CELEBRATES ITS 50TH ANNIVERSARY

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Fifty years ago the publisher of this journal, the Mathematical Institute of the Academy of Sciences of the Czech Republic, was founded. We commemorate this anniversary by a brief history of the Institute.

When Czech universities reopened their gates in 1945 after the World War II a great number of students applied for admission. The duties of university teachers were extremely high. The shortage in persons qualified for teaching at universities as well as for research was obvious. The leading personalities of Czechoslovak mathematics clearly saw the necessity of making the scientific research in mathematics much more intensive than it was before the War; of course, this required to educate more competent specialists.

The first step that was aimed to help to improve the situation was the foundation of the Institute for Mathematics that started its work on March 14, 1947. The main merit for its foundation goes to Eduard Čech who also became its director. The Institute was a body of the Czech Academy of Sciences and Art and its main task was to organize lectures and seminars for university teachers, graduate students, and other interested persons (for example, secondary school teachers). It was also supposed to take care of international cooperation. All members of the Institute did their work at the Institute apart from their main job. The Institute also started to build its own library.

The Institute for Mathematics was later reorganized and renamed, and it became the Central Mathematical Institute on July 1, 1950. Its head was again E. Čech. The scope of activity of the new institute was much wider. Its staff was already formed by about ten full-time scientific workers. In 1950 the Institute started the training of the first group of graduate students. Another task of the Institute was to care for publishing mathematical books and journals.

In 1862 a learned society, the Union of Czech Mathematicians and Physicists (later Union of Czechoslovak Mathematicians and Physicists, now again Union of Czech Mathematicians and Physicists) was established. It took important part in the development of mathematics and physics in our country, and still works very actively.

In the political situation of the beginning of the fifties of the last century the Union of Czechoslovak Mathematicians and Physicists was not in position to keep and manage its property. The plenary session of the Union decided in April 1951 to present its building in Prague as well as its library to the state as a gift with the aim that it should serve the scientific community and the Czechoslovak Academy of Sciences whose founding was in progress.

This intention of the Union was realized and the Institute received its own quarters in Žitná Street 25, Praha 1 in the middle of the fifties and also the library of the Union has been managed by the Institute since that time.

The Czechoslovak Academy of Sciences was established, by an act of October 29, 1952, on January 1, 1953. The Mathematical Institute of the Academy resulted, already on November 11, 1952, from the Central Mathematical Institute, taking over all its tasks, employees and graduate students.

The lack of research in differential equations, numerical analysis and mathematical statistics was felt as the most serious shortcoming of the development of mathematics in Czechoslovakia in the early fifties. The task of the Mathematical Institute was to start and promote research in the disciplines mentioned above. More abstract branches like functional analysis, topology, and mathematical logic developed in the Institute in the sixties.

In 1969, the Mathematical Institute of the Czechoslovak Academy of Sciences was also established in Brno and Otakar Borůvka (10. 5. 1899–22. 7. 1995), famous for his work in the theory of differential equations and graph theory, was appointed its director. The decision on establishment of the Institute took into account the tradition and high standards of the Brno mathematical school. The Institute was reorganized in 1972 and since then it forms the Brno Branch of the Mathematical Institute in Praha.

In the seventies, the Mathematical Institute had eight departments: Dept. of Ordinary Differential Equations, Dept. of Partial Differential Equations, Dept. of Constructive Methods for Solving Differential Equations, Dept. of Numerical Methods, Graph Theory and Mathematical Logic, Dept. of Functional Analysis, Dept. of Probability Theory and Mathematical Statistics, Dept. of Basic Mathematical Structures, and Dept. of Modernization of Mathematical Education. In addition, an integral part of the Institute was the Brno Branch.

The Mathematical Institute is a part of the Academy of Sciences of the Czech Republic since January 1, 1993 when the Czech Republic was established.

The first director of the Institute was Eduard Čech (29. 6. 1893–15. 3. 1960), famous for his work in geometry and topology. He was followed (1954–1972) by Vladimír Knichal (20. 3. 1908–1. 11. 1974), who worked in number theory and theory of real functions, and (1972–1976) by Josef Novák (19. 4. 1905–12. 8. 1999) who received high-valued results in topology and mathematical statistics. The director of the Institute was then (1976–1978) Jiří Fábera (21. 4. 1930–18. 6. 1978) and (1978–1990) Alois Kufner (born 1. 2. 1934) who is interested in the theory of function spaces in connection with differential equations.

After the political changes in our country, the next director (1990–1996) was Jaroslav Kurzweil (born 7. 5. 1926) who is famous for his work in ordinary differential equations and for creating and developing a new theory of integration.

The number of mathematicians working in the Institute stabilized round 75 in the seventies and eighties and diminished to approximately 50 during the period 1990–1992. Today, 63 mathematicians work in the Institute. Starting 1996 the Institute opens two positions for visiting scholars from abroad annually.

Members of the Institute have received a number of scientific grants from several Czech as well as foreign grant agencies. Two grants are concerned with all the members of the Institute. Grant K10019601 (Program of development of fundamental research in basic branches of science, 1996–2000) was supported by the Grant Agency of the Academy of Sciences of the Czech Republic. It continues as the program Mathematics, computer science, and cybernetics: methods, tools, and applications (grant KSK1019101, 2001–2004). The other grant is the institutional research plan A05/98:Z1-019-9-ii Complex development of all branches of mathematics with regards to the needs of physics and technology (1999–2003) supported, through the Academy of Sciences, by the Government of the Czech Republic.

Traditionally the Institute cooperates with Czech as well as foreign universities and other institutions, and, in particular, with the Union of Czech Mathematicians and Physicists. The Mathematical Institute also takes part in the organization of secondary school student competition Mathematical Olympiad and organizes the Day of Open Door for general public annually since 1998. Most of the visitors are secondary school students.

Detailed information on the Mathematical Institute can be found on www.math.cas.cz.

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