Vít Dolejší

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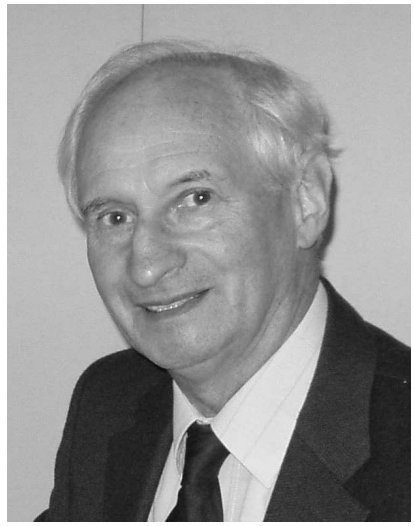
PROF. MILOSLAV FEISTAUER SEVENTIETH BIRTHDAY CELEBRATION

Vít Dolejší, Praha

Prof. Dr. Miloslav Feistauer, DrSc., Dr.h.c., professor of mathematics at Charles University in Prague, celebrated his seventieth birthday on February 8, 2013. He was born in Náchod into a family of teachers. From an early age he was interested in mathematics and physics, and also devoted himself to music. After eleven years at high school in 1960, wondering whether to study violin or mathematics, he decided to study at the Faculty of Mathematics and Physics, Charles University. There he has



spent all his professional life. After graduating in Applied Mathematics in 1965, he joined the Department of Applied Mathematics. After three years he was appointed lecturer and in the following year received the degree of Doctor of Natural Sciences (RNDr.). In 1972 he defended the scientific degree of Candidate of Sciences (Ph.D.) and in 1982 took a habilitation in mathematics. However, since Prof. Feistauer had

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never been politically active, his appointment to the position of associate professor was held up till 1988. In 1990 he was awarded the degree of Doctor of Sciences (DrSc.) and shortly thereafter in 1991 was appointed full professor of mathematics in the field of approximate and numerical methods. In this position he has worked up to now. In the period of 1986–1994 he worked at the Mathematical Institute of Charles University and in 1994 he gained the post of the head of the Department of Numerical Mathematics at Charles University in open competition. In this position he served till 2006.

Professionally, Prof. Feistauer has been dealing with the development and analysis of numerical methods for solving partial differential equations. In 1987–1988 he published together with Prof. Alexander Ženíšek (Technical University, Brno) two papers on the numerical solution of second order nonlinear elliptic problems using the finite element methods in the prestigious journal Numerische Mathematik. In both papers they investigate the influence of numerical integration and approximation of curved boundaries (the so-called variational crimes) on the error of the resulting approximate solution. French mathematician Prof. P. G. Ciarlet (one of the founders of the finite element method and the author of the world famous monograph on this method) underlined the importance of their work: when solving specific nonlinear engineering problems it is usually necessary to use numerical computation of integrals, and approximate the curved boundary of the computational domain.

Since the early nineties, Prof. Feistauer together with his colleagues have been working on the development and analysis of modern efficient methods for solving Euler and Navier-Stokes equations describing compressible flow and nonlinear convection-diffusion problems. In addition, he focuses on the theory of finite volume methods and some problems in the field of nonlinear partial differential equations. The results of Prof. Feistauer are used in industry, thanks to long-term cooperation with Škoda Plzeň in the development of steam turbines. In the past few years he has been dealing with the interaction of flowing fluid and elastic structures. This issue is very attractive. For example, we can mention the simulation of air flow in the human vocal chords. Thanks to his results Prof. Feistauer gained the reputation of a world-renowned expert. He is the author or co-author of 78 publications in journals and more than hundred of professional and scientific papers published in the proceedings of international conferences. In 1993 he published his extensive monograph Mathematical Methods in Fluid Dynamics (Longman Scientific & Technical, Harlow). In 2003 he published his second monograph Mathematical and Computational Methods for Compressible Flow (written with two co-authors). He was asked to write this book by the prestigious publisher Oxford University Press. At present Prof. Feistauer is preparing his third monograph about the so-called discontinuous Galerkin method.

Prof. Feistauer presented papers at more than 160 conferences (including 64 invited plenary lectures) and delivered 140 lectures at universities abroad. He presented papers at 15 conferences at the Mathematical Institute in Oberwolfach. He also served as visiting professor at universities in Germany, France, Austria and the United States. He was the initiator and main organizer of the conferences NMICM (Numerical Modelling in Continuum Mechanics), held in Prague. He was member of program committees of many international scientific conferences. Since 1997 he has been member of the program committee of major international conferences ENUMATH devoted to numerical mathematics, regularly organized every two years in European cities.

Teaching activities of Prof. Feistauer are in accord with his successful research activities. In addition to courses on numerical mathematics he presents lectures on mathematical methods in fluid mechanics and mathematical modelling and supervises seminars on continuum mechanics and numerical mathematics. He has significantly contributed to the development of numerical analysis and mathematical modelling at the Faculty of Mathematics and Physics. His lectures are highly evaluated by students. He has trained a number of graduate and doctoral students who were awarded in various national and international competitions. Many of his former students became prominent experts, associate professors and full professors at universities in the Czech Republic and abroad where they continue his work and fulfil his aims and objectives.

In the years 1994–2012 Prof. Feistauer was member of the Scientific Council of the Faculty of Mathematics and Physics. He has worked in various committees and bodies of the faculty, but also beyond. He is member of the committee for doctoral studies F11 and M6 at Charles University, he was member of the Scientific Council of the Faculty of Mechanical Engineering, currently he is member of the Scientific Council of the Faculty of Chemical Engineering at the Institute of Chemistry and Technology in Prague and for many years he worked in an advisory commission of the Grant Agency of the Czech Republic. He is member of numerous scientific societies (GAMM, ISIM, AMS, EUROMECH, ECMI and others) and member of the editorial boards of five international journals. His research and teaching activities were awarded by the medal of the Faculty of Mathematics and Physics and by the silver medal of Charles University. In 2004 he was elected member of the Learned Society of the Czech Republic. In 2006, Prof. Feistauer received another prestigious award. He was awarded the title of Honorary Doctor of the Technical University of Dresden; he graduated on January 17, 2006, see Pokroky Mat. Fyz. Astronom. *51* (2006), 84–85.

Although there is no doubt that the substance of life of Prof. Feistauer is his scientific work, his great love is music, especially playing the violin. Many years ago he

told me that when listening to lectures at conferences, he sometimes imagined being in a concert hall and instead of expecting lectures about the beauty of mathematics the audience expected performances of violinists. In addition to playing the violin he has tried to compose music. On various occasions, for example, when travelling by train, he composed music which was later presented (sometimes publicly) by his daughter, a professional musician. Since there are many mathematicians with a similar love for music, Prof. Feistauer has quite regularly played with them, whether at school, for example, or at some mathematical conferences. For 42 years Prof. Feistauer has been married to his wife Jaroslava, also a mathematician, and they have two daughters and five grandchildren. His daughter Jana graduated from the University of Economics in Prague, his other daughter Petra studied music at the Conservatory (Musical High School) and Charles University and is now a professional viola player.

Prof. Feistauer is undoubtedly one of the most outstanding personalities of Czech mathematics. We join his friends, colleagues and students who sincerely congratulate him on this important anniversary and wish him good health and, above all, the joy of creative work and many more years of active work at "his" Faculty of Mathematics and Physics.