With deep sadness, we announce that

Prof. Ing. Dr. Ivo Babuska, DrSc., dr. h. c.

world-renowned mathematician and one of the founding fathers of
the Institute of Mathematics of the Czech Academy of Sciences

passed away on Wednesday, 12 April 2023, at the age of 97.

Professor Babuška was a visionary in computational and applied mathematics and a leading personality connecting rigorous mathematics and engineering applications. He substantially influenced the theoretical development of numerical mathematics and mechanics. He is famous for his theoretical results in the theory of partial differential equations. Together with W. C. Rheinboldt, he founded the field of a posteriori error analysis and adaptive methods and played an essential role in their further development. Together with J. M. Melenk, he co-authored the partition of unity finite element method. His work with J. E. Osborn on the convergence analysis for eigenvalue problems has become a fundamental and classical reference in the field. His further achievements include works on homogenization techniques and methods for stochastic partial differential equations. Important notions such as the Ladyzhenskaya-Babuska-Brezzi condition or the Babuska-Aziz theory bear his name. Visions of Ivo Babuska have influenced mathematics and its applications for more than half a century. His 1958 paper on the numerical analysis of the construction technology of the Orlik dam formulated the basic principles of reliability of mathematical modelling and numerical calculations that are still valid. The essence of his understanding of the role of mathematical and numerical modelling is represented by the question "Will you sign the blueprint?" which he often asked during his lectures.

Among his many awards, we find the Alexander von Humboldt Senior U.S. Scientist Award, the Gold Medal of Charles University, the George David Birkhoff Prize, the John von Neumann Medal, the Medal de Scientia et Humanitate Optime Meritis, the Bolzano Medal, the Gauss-Newton Medal, the SIAM Fellowship, the Steele Prize, and the Neuron Prize for Contributions to Science. He holds honorary doctorates from five universities.

We are losing an excellent mathematician, kind colleague and good man.

Honour his memory!

doc. RNDr. Tomas Vejchodsky, Ph.D.
director

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