

Applications of Mathematics

Miloslav Feistauer; Rolf Rannacher; Karel Kozel

Proceedings of the 2nd Summer Conference Numerical Modelling in Continuum Mechanics. Preface

Applications of Mathematics, Vol. 40 (1995), No. 3, 161--162

Persistent URL: <http://dml.cz/dmlcz/134288>

Terms of use:

© Institute of Mathematics AS CR, 1995

Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://project.dml.cz>

PROCEEDINGS OF THE 2ND SUMMER CONFERENCE
NUMERICAL MODELLING IN CONTINUUM MECHANICS
PREFACE

The subsequent issue contains invited plenary lectures delivered at the conference *Numerical Modelling in Continuum Mechanics* (NMICM'94), held at the Faculty of Mathematics and Physics of Charles University in Prague, 22–25 August, 1994.

The first conference on modelling in continuum mechanics took place at Prague in 1990. Because of its great success we decided to repeat such a conference after some time, but to orient it more numerically.

The Prague school of mathematical and numerical modelling in continuum mechanics has a long tradition. Already 30 years ago we had strong personalities in this area as F. Vyčichlo, K. Rektorys and I. Babuška. Professor Babuška was a leading scientist in the Academy of Sciences, but also a well-liked teacher at the Faculty of Mathematics and Physics of Charles University. It was a great pleasure for us to welcome him at our conference as an invited plenary speaker. Further, we should mention Professors J. Nečas and J. Poláček who continued in the tradition founded by F. Vyčichlo, K. Rektorys and I. Babuška. These people educated a younger generation of scientists who are now active in various areas of mathematical modelling

All Czech or better to say Czechoslovak conferences on numerical mathematics, as e.g., the Liblice conferences 1964 and 1967 organized by I. Babuška, the ISNA symposiums organized by I. Marek and the EQUADIFF conferences on differential equations, contained a number of lectures oriented to the area of mathematical and numerical modelling in continuum mechanics.

The 2nd Summer Conference *Numerical Modelling in Continuum Mechanics* was organized in cooperation of Charles University with the University of Heidelberg and Czech Technical University Prague. This was not at all an accident. Charles University as the oldest university in Middle Europe was founded in 1348. According to historical sources, the oldest German university, Ruprecht-Karls Universität Heidelberg, founded in the year 1386, can be considered as a daughter of Paris University as well as a daughter of Charles University. Since 1990 there exists an official cooperation between the University of Heidelberg and Charles University. However,

in mathematics, namely in the areas of numerical mathematics, partial differential equations and their applications in continuum mechanics, the cooperation and scientific contacts are much older. The participation of Czech Technical University was also quite natural. There exists a long cooperation between mathematicians from Czech Technical University and Charles University in applied mathematics, particularly in mathematical fluid dynamics.

The aim of the conference was to bring together different specialists from the following areas: Fluid Dynamics, Porous Media Flows, Reactive Flow Problems and Structural Mechanics.

The Programme Committee of NMICM'94 included W. Jäger (University Heidelberg), R. Jeltsch (ETH Zürich), C. Johnson (Chalmers Technical University Göteborg) and the chairmen of the conference—M. Feistauer (Charles University Prague), R. Rannacher (University Heidelberg) and K. Kozel (Czech Technical University Prague).

The local organizing committee included the members of the Mathematical Institute of Charles University and the Chair of Numerical Mathematics at the Faculty of Mathematics and Physics of Charles University, as well as the members of the Chair of Technical Mathematics at the Faculty of Mechanical Engineering of Czech Technical University. We are grateful to all of them for their hard work during the preparation of the conference.

The Proceedings of NMICM'94 are published in part in Applications of Mathematics (invited plenary lectures) and in part in a separate volume issued by the Faculty of Mathematics and Physics of Charles University (contributed papers).

We wish to express our thanks to the Editor of Applications of Mathematics for his kind offer to devote this issue to the Proceedings of NMICM'94.

Miloslav Feistauer

Rolf Rannacher

Karel Kozel

Chairmen of the conference