Preface

This volume contains the invited papers and papers selected for presentation at the 25th conference on Theory and Practice of Informatics — SOFSEM '98, held in Jasná, Slovakia, November 21–27, 1998.

The SOFSEM conference series started in 1974 as a local event in Czechoslovakia and from the very beginning became the top domestic event in software theory and practice. It has been unique in several respects, being a mix of winter school, conference, and advanced workshop. It brought together professionals from academia and industry and provided an opportunity for both theoreticians and practitioners to learn about the new developments in a broad range of computer science subjects via a series of invited talks. The conference gradually evolved into an international event, keeping most of its original characteristics. It features a relatively large number of invited talks, refereed papers (contributed papers), and refereed poster contributions. In addition, time and space for flash communications, industrial presentations, and exhibitions are provided.

SOFSEM is every year result of a considerable effort by a number of people. Its Advisory Board (Dines Bjørner, Manfred Broy, Michal Chytil, Peter van Emde Boas, Georg Gottlob, Keith G. Jeffrey, Maria Zemankova) and Endowment Board (Keith G. Jeffrey, Jan Pavelka, František Plášil, Igor Prívara, Branislav Rovan, *vice-chair*, Jan Staudek, Jiří Wiedermann, *chair*) is in process of being transformed into a Steering Committee. All members of these committees have devoted special attention to the silver jubilee SOFSEM and I am glad to acknowledge this. As usual, the core of the work has been done by the Program Committee and the Organizing Committee listed below. Special thanks go also to the referees who helped to evaluate the 48 submissions, from which of 18 papers have been selected by the Program Committee for presentation at the conference and for publication in the Proceedings.

The invited talks are traditionally grouped into a number of tracks chosen by the Endowment Board for that particular year. SOFSEM '98 has a special silver jubilee track featuring five talks with a historic aspect in the area of models of computation (R. Freivalds), algorithms (G. Ausiello), formal (M. Broy) and practical (D. Rombach) aspects of software, and database systems (G. van Emde Boas-Lubsen an P. van Emde Boas). In addition, four more tracks of invited talks are featured: Parallel and Distributed Computing (M. Boasson, U. Kastens, and P. Ružička), Electronic Commerce (P. Hanáček, W. Lamersdorf, B. Preneel, L.A.M. Strous, and Ch. Vanoirbeek), Electronic Documents and Digital Libraries (R. Lüling, Ch. Nikolaou, C. Roisin), and Trends in Algorithms (B. Chor, A. Marchetti-Spaccamela, R. Niedermeier, J. Rolim). All but one of these talks are documented in this volume (two of them as abstracts only).

The decision of Springer-Verlag to make available in parallel the electronic versions of the volumes published in the LNCS series adds extra duties to the volume editors. Perhaps, this is the necessary price for the convenice the com-

puter science community is enjoying. I would like to thank all the authors who did their best to follow the guidelines. It would be very difficult (if at all possible) to produce the volume in time without the technical assistance of Miroslav Chladný (Comenius University, Bratislava), who also designed and operated the electronic support for the work of the Program Committee. Last but not least, I would like to thank Springer-Verlag for the traditionally excellent and smooth co-operation in producing this volume.

September 1998   Branislav Rovan
                              SOFSEM '98 Program Committee Chair