

## Preface

The *19th International Symposium on Scientific Computing, Computer Arithmetic and Verified Numerical Computation (SCAN)* was originally planned to be organized by the Institute of Informatics of the University of Szeged (SZTE) in Szeged, Hungary, in the year 2020. Due to the pandemic situation, the Scientific Committee of SCAN decided to postpone the meeting to September 13–15, 2021 and to have it in a fully online format.

The members of the Scientific Committee were the following representatives of the topics of the conference: G. Alefeld (Karlsruhe, Germany), A. Bauer (Ljubljana, Slovenia), J. B. van den Berg (Amsterdam, the Netherlands), G.F. Corliss (Milwaukee, USA), T. Csendes (Szeged, Hungary), R.B. Kearfott (Lafayette, USA), V. Kreinovich (El Paso, USA), J.-P. Lessard (Montreal, Canada), W. Luther (Duisburg, Germany), S. Markov (Sofia, Bulgaria), G. Mayer (Rostock, Germany), J.-M. Muller (Lyon, France), M. Nakao (Tokyo, Japan), T. Ogita (Tokyo, Japan), S. Oishi (Tokyo, Japan), K. Ozaki (Tokyo, Japan), M. Plum (Karlsruhe, Germany), A. Rauh (Brest, France), N. Revol (Lyon, France), J. Rohn (Prague, Czech Republic), S. Rump (Hamburg, Germany/Tokyo, Japan), S. Shary (Novosibirsk, Russia), W. Tucker (Uppsala, Sweden), W. Walter (Dresden, Germany), J. Wolff von Gundenberg (Würzburg, Germany), and N. Yamamoto (Tokyo, Japan). The members of the Organizing Committee were: Balázs Bánhelyi, Tibor Csendes, Boglárka G.-Tóth, Viktor Homolya, Tamás Vinkó, and Dániel Zombori.

During SCAN, more than 50 participants were present and 48 talks in several fields of reliable computation and its applications were given, and organized in 18 thematic sessions. The plenary speakers were Fabienne Jézéquel (Sorbonne University, France), Marko Lange (Hamburg University of Technology, Germany), J.D. Mireles James (Florida Atlantic University, USA), together with the Moore Prize winners Marko Lange and Siegfried Rump (Waseda University, Japan).

The open-access scientific journal *Acta Cybernetica* offered to publish paper versions of selected presentations after a careful peer review process. Altogether, 7 papers were accepted for publication in the present special issue of *Acta Cybernetica*. The full program of the conference, the collection of all abstracts, and further information can be found at <https://www.inf.u-szeged.hu/scan2020/>.

*Andreas Rauh and Balázs Bánhelyi*  
Guest Editors