

Special Volume on Recent Advances in Scientific Computing

This volume of Electronic Transactions on Numerical Analysis (ETNA) contains selected papers by participants of the conference “Recent Advances in Scientific Computing” held at the beautiful resort Hotel Flamingo in Santa Margherita di Pula on Sardinia, Italy, about 30 km from Cagliari, on May 26-29, 2019. A focus of the conference was new developments in large-scale computation, with an emphasis on image restoration. However, many other topics also were covered, including Krylov subspace iterative methods, preconditioning, matrix functions, solution of partial differential equations, network analysis, and the solution of ill-posed problems. The papers in this volume illustrate the breadth and quality of the talks presented by the conference participants.

The occasion for the conference was the 25th anniversary of ETNA. A brief overview of the development of ETNA from the planning of the first volume of ETNA to the publication of this volume can be found elsewhere in this volume.

The conference was very well organized by Giuseppe Rodriguez with competent assistance by members of the organizing committee: Anna Concas, Patricia Diaz de Alba, Caterina Fenu, Luisa Fermo, and Federica Pes. The scientific committee consisted of Ronny Ramlau, Lothar Reichel, and Giuseppe Rodriguez.

The conference brought together about 100 participants from 20 countries and 4 continents. The scientific program consisted of plenary talks, special sessions on a variety of topics in scientific computation, and contributed talks. The plenary talks on Tuesday morning were dedicated to Fiorella Sgallari on the occasion of her 65th birthday. The conference program is available at <http://bugs.unica.it/etna25/>

The scientific program was intense, but breaks after lunch allowed conference participants to discuss mathematical and computational problems, collaborate, or take a swim in the sea.

The papers in this volume were published after being refereed in the order they were accepted for publications. We would like to thank all the authors for their contributions to this volume and the referees for their help with this volume. Special thanks go to Stefan Kindermann and the managing editors who prepared the papers of this volume for publication.

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Ronny Ramlau, Johan Kepler University
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Special volume editors



Figure 1: Some conference participants.



Figure 2: Some conference participants and surroundings.