Preface from the Program Chairs

Welcome to the 22nd Euromicro International Conference on Parallel, Distributed, and Network-Based Processing (PDP 2014).

Parallel, Distributed, and Network-Based Processing has undergone impressive change over recent years. New architectures and applications have rapidly become the central focus of the discipline. These changes are often a result of cross-fertilisation of parallel and distributed technologies with other rapidly evolving technologies. This is the reason why the PDP conference continues to have a distinctive composition: a main track invites papers over a broad range of topics, and nine Special Sessions focus each on a particular sub-domain related to the Parallel, Distributed and Network-based Computing research fields. Each Special Session has its own Chair(s) and Program Committee and invites and selects its own papers, all under the umbrella of the overall conference structure.

The growing number of interesting and significant research papers submitted to PDP demonstrates that the conference is becoming an ever more important international event in the field of parallel and distributed computing research. In particular, the Program Committee of this edition received 220 submissions from 49 countries, which is a record number.

On average each paper received 3.3 reviews, with no paper receiving fewer than two reviews. The result was the selection of 73 regular papers and 38 short papers for publication in these proceedings: the overall acceptance rate of full papers in the PDP 2014 main track is 31.5%, 33.1% including special sessions. In the main track, “Distributed and Network-based Computing” and “Parallel Computing” were the most popular topics. Among Special Sessions, “Formal Approaches to Parallel and Distributed Systems” and “GPU Computing and Hybrid Computing” resulted the most attractive tracks.

We wish to thank all who contributed to the success of the event: the 655 authors, the 233 members of the Programme Committee, the 122 additional reviewers, the 23 Special Session Chairs, the Keynote speakers and the Euromicro Office Staff. In particular we thank the Special Session chairs: William Spataro, Georgios Sirakoulis, Giuseppe A. Trunfio, Davide Marocco, Donato D’Ambrosio (High Performance Computing in Modelling and Simulation); Hamid Sarbazi-Azad, Nader Bagherzadeh, Masoud Daneshtalab (On-Chip Parallel and Network-based Systems); Amir-Mohammad Rahmani, Pasi Liljeberg, Juha Plosila (Multi-Core and Many-Core systems for Embedded Computing); Gabor Kecskemeti, Thierry Delaitre, Attila Kertesz (Cloud Computing on Infrastructure as a Service and its Applications); Dominic Eschweiler, Volker Lindenstruth (Energy-Aware Computing); Igor Kotenko (Security in Networked and Distributed Systems); Ivan Merelli, Marco Beccuti, Andrea Braccioli (Advances in High-Performance Bioinformatics, Systems and Synthetic Biology); Didier El Baz (GPU Computing and Hybrid Computing); Alberto Lluch Lafuente, Emilio Tuosto (Formal Approaches to Parallel and Distributed Systems); and finally Karl-Erwin Grosspietsch and Konrad Klöckner for organising the Work-in-Progress session.

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