Message from the Program Committee Co-chairs

SBAC-PAD 2010

On behalf of the Program Committee, we are pleased to welcome you to the 22nd International Symposium on Computer Architecture and High Performance Computing (SBAC-PAD 2010). SBAC-PAD is an annual international conference series that has an established history of presenting the state of the art, latest trends and new developments in computer architecture design, parallel and distributed technologies and high performance applications.

We would first like to thank the Brazilian Computer Society, the IEEE Computer Society, the Technical Committee on Computer Architecture (TCCA), the Technical Committee on Scalable Computing (TCSC), and the International Federation for Information Processing (IFIP) for their recognition and continued support and sponsorship of SBAC-PAD 2010.

Most of all, we want to thank the 59 members of the Program Committee, all recognized experts in their fields, from around the world who volunteered to participate in the evaluation and selection of papers. The committee was divided into four tracks, each with a respective vice program chair: Applications and Algorithms Track was chaired by Prof. Gianfranco Bilardi; Dr. Fernando Martins chaired the Computer Architecture Track; Prof. Wilson Ruggiero, the Networking and Distributed Systems Track; and the Systems Software Track was chaired by Prof. Laurence Rauchwerger. Their help, together with that of the Organizing Committee, in initially publicizing the symposium had a significant impact on the number and quality of paper submissions.

Authors were invited to submit manuscripts that presented original unpublished research in all areas of computer architecture and high performance computing. Work focusing on applications or emerging technologies were especially welcome. SBAC-PAD 2010 received 100 submissions from industry and academia located in 24 countries, a reflection of its current international standing. We would like to thank the authors for their contributions and, of course, the program committee and the 23 additional reviewers for the time and effort they took to diligently review the submissions. The papers went through a rigorous peer-review process, with every paper receiving at least three reviews and 94% of the papers receiving 4 reviews. After a series of program committee meetings to discuss and evaluate every paper in each track, we chose 30 high quality papers (less than a third of the submissions). The selected papers are on research work from institutions in 11 countries (including 10 papers from Brazil, 6 from the USA, 4 each from France and Spain, as well as papers with authors from Canada, China, Germany, Italy, New Zealand, Norway and Sweden).

In addition to these regular papers, the scientific and technical program includes several keynote presentations from experts who have kindly accepted to share their knowledge and wisdom on a variety of state of the art issues. The three invited speakers are Prof. William D. Gropp from the University of Illinois Urbana-Champaign (USA); Ms. Radha Ratnaparkhi, vice president of IT and wireless convergence at the IBM Thomas J. Watson Research Center (USA); and Prof. Raffaele Tripiccione from the Università di Ferrara, (Italy). To further stimulate discussion among attendees, two workshops have been organized, one focusing on applications for multi and many core architectures, the other on the teaching of computer architecture. Finally, a number of our industrial sponsors will also be presenting some of their insights on leading edge technologies and future developments in the field. Thanks to all of the contributors and participants who together have created an excellent scientific and technical program.

A number of people have endeavored to help organize this outstanding program and to make SBAC-PAD 2010 a resounding success. We would like to offer our sincerest thanks to them all; in particular
thanks must go to Professors Bruno Schulze and Philippe Navaux, this year’s General Chairs, as well as the Steering Committee for their guidance and support, and to Matheus Bandini for his substantial assistance with the development and maintenance of the conference web pages.

Once again, welcome to Petrópolis and to SBAC-PAD 2010! We are sure that you will enjoy both the scientific as well the social program of the conference. We look forward to the many stimulating discussions and presentations.

José E. Moreira
Vinod E. F. Rebello
SBAC-PAD 2010 Program Co-chairs