

Preface

The Latin American High-Performance Computing Conference, CARLA (<http://www.ccarla.org>) is a joint conference of the High-Performance Computing Latin America Community – HPCLATAM – and the Conferencia Latino Americana de Computación de Alto Rendimiento – CLCAR. In 2015 both major HPC Latin-American workshops joined again in CARLA 2015, and were held at the Laboratório Nacional de Computação Científica (<http://www.lncc.br>), in Petrópolis, Brazil.

HPCLATAM (<http://hpclatam.org>) gathers a young but growing community of scientists and practitioners in the HPC area in Latin America. The past events proved that the HPC community in the region is steadily growing. HPCLATAM aims to bring together researchers, developers, and users of HPC to discuss new ideas, experiences, and problems. The main goal of HPCLATAM is to provide a regional forum fostering the growth of the HPC community in Latin America through the exchange and dissemination of new ideas, techniques, and research in HPC.

The CLCAR (<http://www.cenat.ac.cr/>) conference has been held since 2007 and is driven by a group of researchers from universities and research centers in Latin America that seek to promote a space for discussion of new knowledge and trends in the area. A further aim is to coordinate initiatives and efforts toward the development of technologies for high-performance computing that can contribute to solving common problems of social and economic relevance to the region. CLCAR is an event for students and scientists and is dedicated to the areas of high-performance computing, parallel and distributed systems, e-science and its applications to real-life problems, but especially focused on Latin American researchers.

The CARLA 2015 symposium featured invited talks from academy and industry speakers, with short- and full-paper sessions presenting both mature work and new ideas in research and industrial applications in HPC. This conference was co-located with the First Rio de Janeiro High-Performance Computing School – ERAD-RJ 2015 (<http://eradrj2015.lncc.br>) – held during August 24–25, 2015, and the Second HPCAC Brazil Conference (<http://hpcadvisorycouncil.com/events/2015/brazil-workshop>), held August 26, 2015.

Topics of interest from this edition include:

- Scientific Computing Applications
- GPU and MIC Computing: Methods, Libraries and Applications
- Grid and Cloud Computing

The CARLA 2015 website (<http://www.ccarla.org>) provides access to the talks at the meetings and to photos of the activities. The website (<http://www.ccarla.org>) also gives information on the latest event. This book contains the best papers from CARLA 2015, including ten technical papers. The paper by Aline Paes and Daniel Oliveira,

“Running Multi-relational Data Mining Processes in the Cloud: A Practical Approach for Social Networks,” was selected for the Best Paper Award. All technical papers were peer reviewed by at least three different members of the Program Committee.

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