Preface

A separate workshop day attached to the ISC High Performance, formerly known as the International Supercomputing Conference, was first added to the technical program in 2015 under the leadership of Bernd Mohr (Forschungszentrum Jülich GmbH). Supported by the success of the last year, ISC High Performance renewed and further extended the workshop program in 2016. This year Michela Taufer (University of Delaware, USA) joined Bernd Mohr to co-lead the workshop organization. Julian Kunkel (German Climate Computing Center) joined the team as the proceedings chair and managed the organization of proceedings for the workshops.

As in 2015, the 21 workshops at ISC High Performance provided a focused, in-depth platform with presentations, discussions, and interaction on topics related to all aspects of research, development, and application of large-scale, high-performance experimental and commercial systems. Workshop topics included: HPC computer architecture and hardware; programming models, system software, and applications; solutions for heterogeneity, reliability, power efficiency of systems; virtualization and containerized environments; big data and cloud computing; as well as international collaborations. Workshops were selected via a peer-review process by an international committee of 10 experts in the field from Europe, the USA, and Asia.

For the first time, ISC High Performance provided a platform for workshops with their own call for papers and individual peer-review process through an early deadline in December 2015. In all, 13 workshop proposals were submitted before this deadline from organizers all over the world; the committee accepted 10 workshops (seven full-day and two half-day workshops) after a rigorous review process in which each proposal received three reviews. Additionally, each reviewer was given the possibility to discuss all the submissions.

Workshops without a call for papers were invited to submit their proposals in February 2016. For this second deadline, 13 workshop proposals were submitted and 11 workshops (two full-day and nine half-day workshops) were accepted by the committee with the same rigorous peer-review process as for workshops with proceedings.

The 21 workshops were held on Thursday, June 26, 2016, at the Frankfurt Marriott Hotel with over 600 registered attendees, about 170 presentations, and over a dozen panel discussions. Workshop organizers were asked to collect the slides of all presentations at their workshops. PDF versions of the presentation slides were included in the ISC 2016 online proceedings, which were made available online to conference attendees a few days after the conference.

The workshop proceedings volume collects all the accepted papers of the workshops with a call for papers. Each chapter of the book contains the accepted and revised papers for one of the workshops. For some workshops, an additional preface describes the review process for the workshop and provides a summary of the outcome.

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