

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). ISC High Performance has renewed and further extended the workshop program this year welcoming 646 attendees to 21 workshops. This year Michela Taufer (University of Delaware, USA) served as workshop chair and led the workshop organization with workshop deputy chair John Shalf (Lawrence Berkeley National Laboratory). Julian Kunkel (German Climate Computing Center) served as the proceedings chair and managed the organization of proceedings for the workshops with Rio Yokota (Tokyo Institute of Technology) as the proceedings deputy chair.

The 21 workshops at ISC High Performance provided a focused, in-depth platform with presentations, discussion, 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 with a peer-review process by an international committee of 12 experts in the field from Europe, the United States, and Asia.

As in 2016, ISC High Performance provided a platform for workshops with their own call for papers and an individual peer-review process through an early deadline in December 2016. In all, 11 workshop proposals were submitted before this deadline from organizers all over the world; because of their high quality, all proposals were accepted by the committee (seven full-day and four half-day workshops) after a rigorous review process in which each proposal received at least 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 2017. For this second deadline, 15 workshop proposals were submitted and 10 workshops (one 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 22, 2017, at the Frankfurt Marriott Hotel with 646 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 2017 online proceedings, which were made available online to conference attendees a few days after the conference.

The workshop proceedings volume collects all accepted papers of the workshops received after the call for papers and a handful of invited 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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