Preface

It is our pleasure and privilege to introduce this new Euro-Par proceedings volume. Over the years, Euro-Par has become a major event of our well-established parallel and distributed community. This was the 22nd edition of a successful series of conferences which started in Stockholm in 1995.

Today, it is evidence that the field of parallelism is still very active. The traditional topics have been renewed year after year, following the successive generations of machines (including parallel architectures, algorithms, performance, languages, compilers, runtimes, parallel programming, foundations of parallelism, numerical applications) and some new topics have emerged (accelerator computing, hierarchical platforms, clouds, interactive computing, data management analytics). We now face the challenge of building extreme-scale high-performance computing platforms, which are the only way to address the hard societal challenges in health, security, or the climate. All the historical disciplines of parallelism are impacted by such deep changes and by strong interactions between the various topics (e.g., energy optimization, scalability, or fault-tolerance issues). Euro-Par keeps the original organization into independent topics covering all these aspects.

The conference is organized in parallel sessions that reflect the diversity of the topics. We received 176 full submissions and accepted 47 papers after an 8-week review period in a full-day Program Committee (PC) meeting involving all the topic chairs or local chairs, which led to the selective rate of acceptance of less than 27 %. This high quality is also assessed by three distinguished papers. Most papers received four reviews while a few received three or five evaluations. Two additional presentations given by industrial sponsors have been included in the program. We would like to warmly thank all the Scientific Committee members of the various topics. The team of chairpersons had the enormous task of bringing many innovative ideas, which finally led to a very attractive and timely program. The whole evaluation process ran smoothly thanks to the involvement of each of them.

In addition, we are pleased to present three keynote talks of well-recognized colleagues, namely, Susanne Albers ("Energy-Efficient Algorithms"), Walfredo Cirne ("Improving Cloud Effectiveness"), and Dror Feitelson ("Resampling with Feedback— A New Paradigm of Using Workload Data for Performance Evaluation") plus an invited talk of Arnold Rosenberg ("Scheduling DAGs Opportunistically: The "Dream and the Reality Circa 2016"). This exciting program was complemented by two days of dedicated workshops and tutorials on more specialized themes. The huge work of managing workshops and tutorials was conducted very efficiently by Frédéric Desprez, always in a positive mood. As with the previous editions, the papers selected in the various workshops are published in a separate proceedings volume after the conference.

We would like to emphasize that Euro-Par is not only a premium scientific meeting, but it is also a very social event. The organization of such a conference involves a great amount of work, completed under the guidance and support of the Steering Committee

members and especially Christian Lengauer and Luc Bougé. However, it was also a great opportunity for our team in Grenoble to strengthen our internal links in order to provide the best for participants coming from all over the world. We are sincerly grateful to Sophie Azzaro and Annie Simon at Inria and to the other members of the organization team for their constant help.

We would also like to warmly thank our academic institutions and their staff, namely, Université Grenoble Alpes (and particularly the Institut Universitaire de Technologie 2), Grenoble Institute of Technology, and Inria for their logistical support at many levels, as well as our industrial partners.

June 2016   Pierre-François Dutot
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