

Guest Editorial for High-Level Parallel Programming and Applications

Clemens Grellck¹

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As processor and system manufacturers increase the amount of both inter- and intra-chip parallelism it becomes crucial to provide the software industry with high-level, abstract, well defined, efficient and effective tools for engineering high-quality software for ubiquitous parallel systems. Parallel and distributed programming methodologies are still dominated by low-level techniques such as send/receive message passing or similarly unstructured shared memory mechanisms. High-level parallel programming and its applications offer many potential advantages to this effect and have a key role to play in the scalable exploitation of ubiquitous parallelism.

Since 2001 the series of initially Workshops and more recently Symposia on High-level Parallel Programming and Applications (HLPP) has been a forum for researchers developing state-of-the-art concepts, tools and applications for high-level parallel programming. The general emphasis is on software quality, programming productivity and high-level performance models. The 7th International Symposium on High-Level Parallel Programming and Applications was held July 3 and 4, 2014, in the historic Doelenzaal of the University of Amsterdam, right in the historic heart of the city.

HLPP 2014 received 34 submissions, out of which the international programme committee selected 15 contributions for presentation at the symposium and for inclusion in this special issue. The symposium was opened with a keynote by Frank Schlimbach, Intel Corp, entitled *Parallelism Through CnC: More Flexibility, Less Pain*, that was well received by the 30 participants of the symposium. Our special thanks go to

- Frank Schlimbach for his great keynote,
- the University of Amsterdam for providing a fantastic venue,

✉ Clemens Grellck
c.grellck@uva.nl

¹ Informatics Institute, University of Amsterdam, Science Park 904, Amsterdam, The Netherlands

- Springer Verlag and the International Journal of Parallel Programming for agreeing to publish this special issue and for their continued editorial services and support,
- the HLPP steering committee for accepting our offer to host HLPP 2014 at the University of Amsterdam and for their support from beginning to end,
- the authors of all submitted papers and all participants of HLPP 2014,
- Roy Bakker, Roeland Douma and Jacqueline van der Velde for their organisational support during the symposium,
- the members of the programme committee and all additional reviewers for their crucial work in selecting the best papers for HLPP 2014 and for this special issue.

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The Symposia on High-Level Parallel Programming and Applications are well on track. HLPP 2015 will take place at Pisa, Italy, and in 2016 HLPP will be hosted by the University of Münster, Germany.

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Clemens Grelck

Organiser of HLPP 2014

Guest editor of this IJPP special issue