EDITORIAL



## Guest Editor's Note: High-Level Parallel Programming 2019

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This special issue contains revised versions of selected papers from the *12th International Symposium on High-Level Parallel Programming and Applications* (*HLPP-2019*), held 3–5 July 2019 in Linköping, Sweden.

The HLPP series of workshops/symposia, started in 2001, is 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.

After a rigorous peer-review process in two stages performed by the HLPP-2019 program committee members and additional reviewers (in a first stage for presentation at the HLPP-2019 symposium and in a second stage for inclusion in the special issue), revised versions of 7 of the papers presented at HLPP-2019 have been accepted for publication in this special issue:

- Christopher Brown, Vladimir Janjic, Adam Barwell, Jose Daniel Garcia, Kenneth MacKenzie: *Refactoring GrPPI: Generic Refactoring for Generic Parallelism in C++*
- Christopher Brown, Vladimir Janjic, Mehdi Golo, John McCall: *Programming Heterogeneous Parallel Machines using Refactoring and Monte-Carlo Tree Search*
- Frédéric Gava, Yoann Marquer: Axiomatization and Imperative Characterization of Multi-BSP Algorithms
- Clemens Grelck, Cedric Blom: Resource-aware Data Parallel Array Processing
- Marcel Köster, Julian Groß, Antonio Krüger: Massively Parallel Rule-Based Interpreter Execution on GPUs using Thread Compaction
- Luca Rinaldi, Massimo Torquati, Daniele De Sensi, Gabriele Mencagli, Marco Danelutto: *Improving the Performance of Actors on Multi-Cores with Parallel Patterns*
- Fabian Wrede, Herbert Kuchen: Towards High-Performance Code Generation for Multi-GPU Clusters Based on a Domain-Specific Language for Algorithmic Skeletons

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Christoph Kessler, guest editor