CALL FOR PAPERS



IMPACT 2013

3rd International Workshop on Polyhedral Compilation Techniques Berlin, Germany, January 21, 2013

in conjunction with

the 8th International Conference on High Performance Embedded Architectures and Compilers (HiPEAC 2013) in Berlin, Germany, January 21–23, 2013

With ubiquitous multicore processors and the increasing role of hardware accelerators, polyhedral compilation techniques have gained a lot of attention in both academia and industry. Polyhedral compilation provides a homogeneous framework to design effective optimizations for high performance computing, addressing coarse-grain and fine-grain parallelism, distributed- and shared-memory parallelism. IMPACT is a unique workshop focusing exclusively on polyhedral compilation technologies, bringing together researchers and practitioners for a high-quality one-day event including keynote, technical paper presentations, and panel discussions.

We welcome both theoretical and experimental papers on all aspects of polyhedral compilation and optimization. We also welcome submissions describing preliminary results, crazy new ideas, position papers, experience reports, and available tools, with an aim to stimulate discussions, collaborations, and advances in the field. Topics of interest include, but are not limited to: program optimization (automatic parallelization, tiling, etc.); code generation; data/communication management on GPUs, accelerators and distributed systems; hardware/high-level synthesis for affine programs; static analysis; program verification; model checking; theoretical foundations of the polyhedral model; extensions of the polyhedral model; scalability and robustness of polyhedral compilation techniques; tool demonstration.

Important dates

Submission deadline (extended):	November 02, 2012
Notification of acceptance:	November 30, 2012
Final version due:	December 10, 2012
Workshop:	January 21, 2013

Submission

Submissions should not exceed 8 pages (recommended 6 pages) formatted as per ACM proceedings format. Please use the following template when preparing your manuscript:

http://www.acm.org/sigs/publications/proceedings-templates

Submissions should be in PDF format and printable on US Letter or A4 sized paper. Please send your submission by the deadline to impact-chairs@lists.gforge.inria.fr

Please indicate in your email if you wish to submit as a: (1) regular paper, (2) position paper, (3) wild and crazy idea, or (4) tool demonstration. Proceedings will be published online and distributed to the participants. Publication at IMPACT will not prevent later publication in conferences or journals of the presented work.

Keynote speaker (confirmed)

The keynote at IMPACT 2013 will be given by Albert Cohen (INRIA, France).

Committees

Organizers and Program Chairs

Armin Größlinger (University of Passau, Germany) Louis-Noël Pouchet (University of California Los Angeles, USA) Contact: impact-chairs@lists.gforge.inria.fr

Program Committee

Christophe Alias (ENS Lyon, France) Cédric Bastoul (INRIA, France) Uday Bondhugula (IISc, India) Philippe Clauss (University of Strasbourg, France) Albert Cohen (INRIA, France) Alain Darte (ENS Lyon, France) Paul Feautrier (ENS Lyon, France) Martin Griebl (University of Passau, Germany) Sebastian Hack (Saarland University, Germany) François Irigoin (MINES ParisTech, France) Paul Kelly (Imperial College London, UK) Ronan Kervell (Wild Systems / Silkan, USA) Vincent Loechner (University of Strasbourg, France) Benoît Meister (Reservoir Labs, Inc., USA) Sanjay Rajopadhye (Colorado State University, USA) P. Sadayappan (Ohio State University, USA) Michelle Mills Strout (Colorado State University, USA) Nicolas Vasilache (Reservoir Labs, Inc., USA) Sven Verdoolaege (KU Leuven/ENS, France)