CALL FOR PAPERS

HiStencils 2014

1st International Workshop on High-Performance Stencil Computations
Vienna, Austria, January 21, 2014
`http://www.exastencils.org/histencils/`

in conjunction with

the 9th International Conference on High Performance
Embedded Architectures and Compilers (HiPEAC 2014)
in Vienna, Austria, January 20–22, 2014

Overview

Stencil computations are an important class of codes used in a variety of application domains ranging from image and video processing to simulation and computational science applied in several areas of natural science. With consumer devices and high-end systems becoming increasingly powerful, stencil computations are playing an increasingly important role in research and in applications alike. Today, real-world stencil codes are often hand-tuned which requires a huge amount of engineering effort given the variety of stencil codes in use. Therefore, simplifying the task of constructing stencil codes that deliver high performance has become an important topic in research.

HiStencils is a workshop focusing on stencil computations from embedded environments to exascale computing and advanced software technology needed to simplify the construction of stencils codes delivering high performance. *HiStencils* is intended to bring together researchers, students and practitioners dealing with, among others, performance optimzation, code generation and software technology for stencil computations. We strongly encourage submissions describing preliminary results, 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: performance optimization of stencil computations; auto-tuning and machine learning for stencil codes; software technology for stencil computations; stencil code generation for GPUs, accelerators and distributed systems; stencil applications in embedded systems; hardware/high-level synthesis for stencil codes; harnessing stencil computations for exascale performance; static analysis and verification of stencil codes; theoretical aspects of stencil computations; multigrid stencil methods; tool demonstration.**

Important Dates

Submission deadline:	October 25, 2013
Notification of acceptance:	November 29, 2013
Final version due:	December 15, 2013
Workshop:	January 21, 2014

Submission

Submissions should not exceed 8 pages (recommended 6 pages) formatted as per ACM proceedings format. Please use the "tighter alternate style" (option 2) available from

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

when preparing your manuscript. Submissions should be in PDF format and printable on US Letter or A4 sized paper. Proceedings will be published online and distributed to the participants. Publication at *HiStencils* will not prevent later publication in conferences or journals of the presented work. Please send your submission by the deadline to `histencils@exastencils.org`.

Post-Proceedings Special Issue

Selected submissions will be invited for a special issue of "Parallel Processing Letters" (ISSN 0129-6264) after the workshop.

Committees

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