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. 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 optimization, code generation and software technology for stencil computations. 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: December 05, 2014
Notification of decision: December 21, 2014
Workshop: January 20, 2015

**Support**

HiStencils is kindly supported by DFG priority programme 1648 and NVIDIA Corporation.

**Submissions & Special Issue**

Submissions should not exceed 8 pages (recommended 6 pages) formatted as per ACM proceedings format (“alternate style”). Submissions should be in PDF format and printable on US letter or A4 sized paper. Please send your submission by the deadline to: histencils@exastencils.org

Proceedings will be published online on the HiStencils website and in an online publication system (for long-term availability). In addition, printed copies will be distributed to the participants at the workshop. Selected submissions will be invited for a special issue of the journal “Parallel Processing Letters” after the workshop.

**Program Committee**

Carlo Bertolli (IBM, US), Matthias Bolten (Bergische Universität Wuppertal, DE), Rezaul Chowdhury (Stony Brook University, US), Matthias Christen (Università della Svizzera Italiana, CH), Mike Clark (NVIDIA, US), Francisco Gaspar (Universidad de Zaragoza, ES), Dominik Gödeke (TU Dortmund, DE), Frank Hannig (Friedrich-Alexander-Universität Erlangen-Nürnberg, DE), Bradley C. Kuszmaul (Massachusetts Institute of Technology, US), Hatem Ltaief (KAUST, SA), István Reguly (University of Oxford, GB), Rochus Schmid (Ruhr-Universität Bochum, DE), Jan Treibig (Friedrich-Alexander-Universität Erlangen-Nürnberg, DE)

**Contact us**

To find out more about HiStencils 2015 visit us at http://www.exastencils.org/histencils/2015/ or send any questions to Armin Größlinger and Harald Köstler: histencils@exastencils.org.