

SEM4HPC (<http://periscope.in.tum.de/sem4hpc/>)

Previous Events (<http://periscope.in.tum.de/sem4hpc/index.php/previous-events/>)



(<http://periscope.in.tum.de/sem4hpc/>)

## SEM4HPC

(<http://periscope.in.tum.de/s>

SEM4HPC (<http://periscope.in.tum.de/sem4hpc/>)

Tools

Call for papers (<http://periscope.in.tum.de/sem4hpc/index.php/call-for-papers/>)

OK

Date and Venue (<http://periscope.in.tum.de/sem4hpc/index.php/date-and-venue/>)

Committees (<http://periscope.in.tum.de/sem4hpc/index.php/committees/>)

Programme (<http://periscope.in.tum.de/sem4hpc/index.php/programme/>)

## SEM4HPC

(<http://periscope.in.tum.de/sem4hpc/>)

# Software Engineering Methods for Parallel and High Performance Applications (SEM4HPC)

(A HPDC'17 (<http://www.hpdc.org/2017>) **Workshop**)

Washington D.C., USA, June 26, 2017

Workshop Programme available [here](http://periscope.in.tum.de/sem4hpc/index.php/programme/) (<http://periscope.in.tum.de/sem4hpc/index.php/programme/>)

Modern platforms, composed of multicore CPUs coupled with accelerators such as graphics processing units (GPUs) or Intel Xeon Phi, are now widely used in high performance computing to address the challenges of performance improvement at low cost. However, compared to the traditional sequential computing paradigm, the software development, analysis and migration tools for parallel and high performance applications are far less matured for the IT industry to make a shift towards the new computing paradigm. Building and maintaining parallel applications are much harder than its sequential counterpart. Applications written for a high computing platform always aim to extract the maximum performance out of the infrastructure. To write such a software the programmer needs to be aware of the issues like resource contention, load-balancing, limited co-processor memory, data transfer speed, data-marshalling cost and so on. Today's software engineering is not equipped enough to assist the designers and developers to address these challenges.

First goal of this workshop is to bring the global industry and academic experts in this area to identify various research challenges that exist in software engineering methods for parallel and high performance

Search

### Navigation

#### SEM4HPC

<http://periscope.in.tum.de/sem4hpc/>

[Call for papers](http://periscope.in.tum.de/sem4hpc/index.php/call-for-papers/) (<http://periscope.in.tum.de/sem4hpc/index.php/call-for-papers/>)

[Date and Venue](http://periscope.in.tum.de/sem4hpc/index.php/date-and-venue/) (<http://periscope.in.tum.de/sem4hpc/index.php/date-and-venue/>)

[Committees](http://periscope.in.tum.de/sem4hpc/index.php/committees/) (<http://periscope.in.tum.de/sem4hpc/index.php/committees/>)

[Programme](http://periscope.in.tum.de/sem4hpc/index.php/programme/) (<http://periscope.in.tum.de/sem4hpc/index.php/programme/>)

application development, maintenance and migration. Next, the workshop aims to bring out the current state of the art and practice of the software engineering methods through case-studies, novel research ideas, and expert panel discussion. An important aspect of tool development is the sustainability of tools which is a big challenge for all the tools groups. New ideas and policies need to be discussed among funding agencies, tool developers, and tool users from various areas to enable the continuous development, maintenance, and porting of tools for the growing spectrum of parallel systems and programming interfaces.

---

### **Important dates**

Paper submissions due: ~~March 20, 2017~~ extended to April 8

Notification to authors: April 24, 2017

Camera-ready copies: May 6, 2017

Workshop on: June 26, 2017 (to be confirmed)

---

November 9, 2015 | **mfirbach**

---