



## Events

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## Special Guest Lectures

**High Performance Computing on GPU and Multi-GPU on Example of CFD Algorithms****Marek Blazewicz, Poznan Supercomputing and Networking Center**

Applications Department

Johnston Hall 338  
December 10, 2010 - 10:00 am**Abstract:**

GPU is a highly parallel, multi-threaded, many-core processor with a very high computational power and memory bandwidth. When performing algorithms with majority of homogeneous computations one may achieve great speed-up (up to several hundreds) over sequential code run on CPU. In this talk GPU architecture is briefly discussed as well as its advantages and drawbacks. Common problems related to parallelization process on single and multi-GPU are presented on the example of the CFD algorithms.

