

## **IAS Seminar**

**Topic:**        **The Distributed and Unified Numerics Environment (Dune)**

**Speaker:**    Oliver Sander, IGPM, RWTH Aachen University

**Contents:**    Dune is a set of C++ libraries for grid-based numerical methods for PDEs. Each library covers one aspect of PDE simulation software such as grids, linear algebra, or shape functions. The emphasis is on flexibility and efficiency. For each topic, an abstract interface is declared, and the user can choose between a number of different implementations. This allows to always use the best data structure for each implementation at hardly any additional cost. Dune is free software and runs on a large variety of platforms.

We present the concepts and the core libraries, and explain a few example programs.

**Time:**        Thursday, 30 October 2014, 14:00

**Venue:**        Jülich Supercomputing Centre, Besprechungsraum 1, building 16.3, room 107

Anyone interested is cordially invited to participate in this seminar.

sgd Prof. Dr. Dr. Thomas Lippert