

**Judith Angel (Hamburg University of Technology, Germany)**

*“A parareal algorithm for shallow water equations”*

Through the trend towards massively parallel high-performance computers the development of parallel algorithms has become indispensable to employ their computational power. The parareal algorithm computes the solution of time-dependent problems parallel in time, meaning that approximations to the solution at different times are computed simultaneously. In this talk, we will focus on hyperbolic one-dimensional problems, where a combination of parareal and a discontinuous Galerkin method will be used. The practical use of this method will be illustrated by means of a Python implementation for shallow water equations and corresponding numerical results.