UNIVERSITÄT SALZBURG

Fachbereich Computerwissenschaften

EINLADUNG

zum Gastvortrag am

Donnerstag, 24. November 2016,
16:00 Uhr, T02

Institutsgebäude Jakob-Haringer-Str. 2, Itzling

von

Prof. Dr. Ulrich Rüde

Department of Computer Science 10, Lehrstuhl für Simulation
Universität Erlangen-Nürnberg

zum Thema:

Simulating Complex Flow Phenomena at Scale

Abstract:

The Lattice Boltzmann method uses explicit time stepping and thus a standard space decomposition can achieve good scalability. We propose an architecture-aware co-design of the models, algorithms, and data structures that leads to excellent node performance, combined with a scalability up to a million parallel threads. We will present examples how such a parallel solver can be interfaced to other tools to enable complex coupled multi-physics simulations.

Prof. Dipl.-Ing. Dr. Rade Kutil (Host) **Univ.-Prof. Dr. Marian Vajteršic (Host)**