

## EINLADUNG

Zeit: Donnerstag, 16. März 2017, 16.00 Uhr

Ort: Raum 9222, E3, Ahornstr. 55

Referent: Dr. Johannes Lotz  
LuFG Informatik 12, RWTH Aachen

Thema: Meta Adjoint Programming in C++

Adjoint codes play an important role in simulation and optimization spread over a variety of applications in e.g. computational fluid dynamics, computational finance, or machine learning. The development of adjoint codes is a multidisciplinary research topic in applied mathematics as well as computer science. Developing efficient adjoint codes requires an exploitation of the underlying mathematical formulations as well as a targeted implementation for a specific programming environment, including compute architecture as well as programming language.

In this talk, the meta adjoint programming technique is presented, which uses C++11 features and template expressions to generate adjoint code at compile time. This approach turned out to be applicable particularly well on GPU codes, which is a major step forward in this research area.

Es laden ein: Die Dozenten der Informatik