



Oberseminar Mathematische Strömungsmechanik

Institut für Mathematik der Julius-Maximilians-Universität Würzburg

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Mini-course on Numerical Methods for Hyperbolic Equations

Abstract:

The short course on numerical methods consists of 6 hours lectures, supplemented with live simulations, on advanced numerical methods for solving hyperbolic partial differential equations. The course covers Finite Volume methods, second order TVD methods, higher order ENO-WENO techniques, and the Discontinuous Galerkin approach, both in the simple one-dimensional case and on complex unstructured geometries.

The course is primarily designed for Master and PhD students and also post-doctoral researchers, and it is rounded-off by an advanced state of the art seminar-style lecture on high order accurate Lagrangian schemes on so called *crazy* moving unstructured meshes.

Meetings: Tuesdays Jan. 7, 14 and 21 from 1 to 2 pm and Thursdays Jan. 9, 16, 23 from 2 to 3 pm in room 40.03.003

rm. 40.03.003 (Mathematikgeb. Ost) Tue. Jan. 7, 14, 21 at 1-2 pm & Thurs. Jan. 9, 16, 23 at 2-3 pm

Zu diesem Minikurs sind Sie herzlich eingeladen.

gez. Christian Klingenberg