Oberseminar Mathematische Strömungsmechanik

Institut für Mathematik der Julius-Maximilians-Universität Würzburg

Hyperbolic equations - structure preserving methods & other topics

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Robust invariant domain preserving approximation of the compressible Navier-Stokes equations

Abstract:

The objective of this talk is to present a fully-discrete approximation technique for the compressible Navier-Stokes equations. The method is implicit-explicit, second-order accurate in time and space, and guaranteed to be invariant domain preserving. The restriction on the time-step size is the standard hyperbolic CFL condition. One key originality of the method is that it is guaranteed to be conservative and invariant domain preserving under the standard hyperbolic CFL condition. This is a joint work with M. Maier, B. Popov and I. Tomas.

via Zoom video conference (request the Zoom link from klingen@mathematik.uni-wuerzburg.de)

Friday, Feb. 26 at 3 pm CET

Zu diesem Vortrag sind Sie herzlich eingeladen.

gez. Christian Klingenberg