Fachbereich Mathematik und Statistik

Universität
Konstanz

# Einladung

Im Rahmen des mathematischen Kolloquiums hält

## Professor Dr. Yuri Trakhinin
(Sobolev-Institut Novosibirsk / Universität Konstanz)

am **Donnerstag**, dem **06.06.2019**, einen Vortrag zum Thema:

**"Local-in-time existence of MHD contact discontinuities"**

Beginn: **17:00 Uhr**

Raum: **F426**

Interessenten sind herzlich willkommen!

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**Abstract:** We discuss recent results for contact discontinuities in ideal compressible magnetohydrodynamics (MHD). MHD contact discontinuities are characteristic discontinuities with no flow across the discontinuity for which the pressure, the magnetic field and the velocity are continuous whereas the density and the entropy may have a jump. For 2D planar MHD flows with a contact discontinuity we prove the local-in-time existence of a unique smooth solution to the corresponding free boundary problem provided that the Rayleigh-Taylor sign condition on the jump of the pressure is satisfied at each point of the initial discontinuity.

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(Prof. Dr. Heinrich Freistühler)