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## Einladung zu einem Vortrag

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zum Thema

# **Rigorous Connecting Orbits from Numerics**

Ort: I.2.57 der Universität Klagenfurt

Zeit: Freitag, 24. Juni 2016, um 10:00 Uhr s.t.

### *Kurzfassung:*

Rigorous numerical methods for establishing the existence of connecting orbits in systems of autonomous differential equations are presented.

Previously we studied the existence of a transversal connecting orbit from one hyperbolic periodic orbit to another. Given a suitable approximate connecting orbit and assuming that a certain associated linear operator is invertible, the existence of a true connecting orbit near the approximate orbit provided the approximate orbit is sufficiently "good" was proved.

More recently we studied orbits connecting hyperbolic equilibria in a parametrized autonomous system. Given a suitable approximate connecting orbit and assuming that a certain associated matrix is invertible, the existence of a true connecting orbit near the approximate orbit and for a nearby parameter value is proved provided the approximate orbit is sufficiently "good". (This is joint work with Brian Coomes and Huseyin Kocak of the University of Miami, Coral Gables)

Das Institut für Mathematik freut sich auf Ihren Besuch.

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