
Einladung zu einem Vortrag von

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zum Thema

**A contour algorithm for computing
stable fiber bundles of
nonautonomous, noninvertible
maps**

Ort: I.2.01 der Universität Klagenfurt

Zeit: Mittwoch, 17. Feber 2016, um 10:00 Uhr c.t.

Kurzfassung:

Stable fiber bundles are the nonautonomous analog of stable manifolds and these objects provide valuable information on the underlying dynamics. We propose an algorithm for their approximation that is based on computing zero contours of a particular operator. The resulting program applies to a wide class of models, including noninvertible and nonautonomous discrete time systems. Precise error estimates are provided and fiber bundles are computed for several examples. Finally, we apply the contour algorithm to (non)autonomous ODEs. For the famous three-dimensional Lorenz system, we calculate several approximations of the two-dimensional Lorenz manifold.

Das Institut für Mathematik freut sich auf Ihren Besuch.

<https://www.math.aau.at/>