



# Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg  
Lehrstuhl für Wissenschaftliches Rechnen IX

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## **Stabilization of Hydrodynamics Equations by feedback control: the main concepts and ideas; history and perspectives**

After a brief historical introduction on emergence of exact controllability theory and theory of stabilization by feedback control for equations of hydrodynamics (i.e. in fact for nonlinear PDEs) we consider the problem of local stabilization by feedback control for Navier-Stokes equations of viscous incompressible fluid. The main ideas of stabilization theory will be discussed: its close connection with spectral theory for corresponding Oseen equations, key importance of starting control in construction of different feedback controls, and others. At last we will inform briefly what is known now on nonlocal stabilization for some Hydrodynamics equations and will formulate open problems.

Ort: Raum 30.02.003 (2. Stock) (Mathegeb. 30 West) Zeit: Donnerstag, 08.02.2018, 13.15 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.

*gez. Prof. Dr. Alfio Borzi*  
*gez. Prof. Dr. Roland Griesmaier*  
*gez. Prof. Dr. Bernadette Hahn*