

International Research Training Group 1529

## Mini-Workshop on Fluid Dynamics

January 31, 2012, S2 15/room 315

### PROGRAM

- 09:00 – 09:20 Hirofumi Notsu, Waseda University  
“Numerical computations of flow problems  
by schemes based on the method of characteristics“
- 09:20 – 9:40 Tobias Nau, Universität Konstanz  
“The periodic Stokes problem and the Helmholtz  
projection in a rectangular cylinder“
- 09:40 – 10:00 Mario Kaip, Universität Konstanz  
“Mixed Order Systems and Free Boundary Value Problems“
- 10:00 – 10:20 Tomoyuki Nakatsuka, Waseda University  
“On uniqueness of stationary solutions to the  
Navier-Stokes equations in exterior domains“
- 10:20 – 10:50 **Coffee Break**
- 10:50 – 11:10 Atsuhiko Mizusawa, Waseda University  
“On Handlebody-Knot Theory“
- 11:10 – 11:30 Matthias Köhne, C.S.I., TU Darmstadt  
“The Stokes Operator subject to Energy  
Preserving Boundary Conditions“

- 11:30 – 11:50 Lorenz von Below, TU Darmstadt  
“The spin-coating process with convective heat transfer“
- 11:50 – 12:10 André Fischer, C.S.I., TU Darmstadt  
“Existence, uniqueness and exponential stability of the steady state solution to a model in electrohydrodynamics“
- 12:10 – 13:30 **Lunch**
- 13:30 – 13:50 Thieu Huy Nguyen, TU Hanoi und TU Darmstadt  
“Global Existence and Exponential Stability of Mild Solutions to NSE with Small Data“
- 13:50 – 14:10 Kohei Soga, Waseda University  
“On the formulation of bubble generation in liquid“
- 14:10 – 14:30 Georg Schöchtel, TU Darmstadt  
“Motion of inertial particles in Gaussian fields driven by an infinite-dimensional fractional Brownian motion“
- 14:30 – 15:00 **Coffee Break**
- 15:00 – 15:20 Yoritaka Iwata, G.S.I. Darmstadt  
“Logarithmic representation of infinitesimal generators“
- 15:20 – 15:40 Raphael Schulz, TU Darmstadt  
“Spatial Asymptotic Profiles of Solutions of the Navier-Stokes System in a Rotating Frame“
- 15:40 – 16:00 Manuel Nesensohn, TU Darmstadt  
“ $L_p$ -theory for a generalized viscoelastic fluid model“
- 16:00 – 16:20 Siegfried Maier, TU Darmstadt  
“Parabolic equations on domains of wedge type“