# Registration

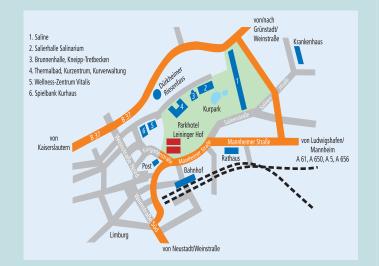
To register, please visit www.tu-cottbus.de/las/forschung/for1182/workshop-2011.html e-mail: for1182@tu-cottbus.de

Registration will be opened from March 15th, 2011 until June 15th, 2011.

# **Important deadlines**

Abstract submission: May 1st, 2011 Notification of acceptance: June 1st, 2011 Registration: June 15th, 2011

Conference fee: 100 €



Drive A650 down to Bad Dürkheim. Take first exit Parkhotel Leininger Hof on your right.

### By Train:

The railway station of Bad Dürkheim is about 200m from the Parkhotel. By arrival you can cross the place. Before the German Post Office turn right into the "Kurgartenstrasse" and after approximatly 50m you will find the Parkhotel Leininger Hof on

# FOR 1182 Workshop 2011

Dynamics of Coherent Structures in Turbulent Flows

# Coming from direction Mannheim/Ludwigshafen:

on your right hand "Bad Dürkheim - Zentrum", passing under the bridge you arrived already on the "Mannheimer Strasse". Please follow this road for about 3km till the German Post Office. Arriving before the German Post Office, please turn right, you are now on the "Kurgartenstrasse", after approximatly 50m you will see the

your right.

# **Organizers:**

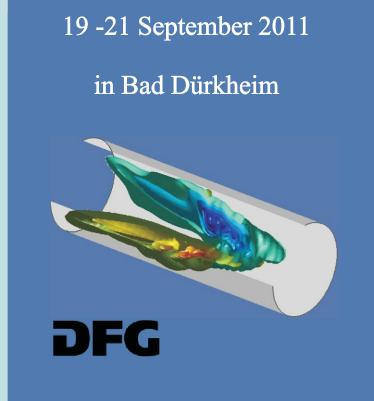
Prof. C. Egbers egbers@tu-cottbus.de

Prof. B. Eckhardt bruno.eckhardt@physik.uni-marburg.de

Prof. J. Schumacher joerg.schumacher@tu-ilmenau.de

# **Secretary:**

Silke Kaschwich silke.kaschwich@tu-cottbus.de

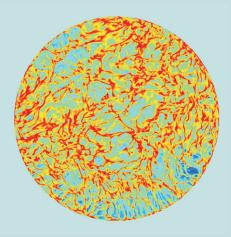


# **Scientific Objective:**

Nearly all turbulent flows in nature and technology are bounded by solid walls. In their vicinity, strong interactions between differently sized structures dominate the dynamics. Starting with Ludwig Prandtls boundary layer concept, refined by symmetry arguments, many important results on mean profiles of turbulent field quantities have been obtained. Nevertheless, uncertainties in the mean profiles and scaling exponents, which are necessary for the calculation of global transport quantities, lead to variations in the predicted global transport that can vary by orders of magnitude. In line with scientific goals of our Research Focus Group FOR 1182 which is funded by the Deutsche Forschungsgemeinschaft (DFG) this workshop will present recent new insights and observations on the dynamics of turbulence near solid walls and discuss the connection between local dynamical processes near the walls and global transport properties. Progress in understanding is expected by comparison of three fundamental flows that have been studied so far separately: thermal convection in a cell heated from below (Rayleigh-Bénard), shear turbulence between two concentric and rotating cylinders (Taylor-Couette), and pressure-driven turbulence in pipes, ducts and channels, transition to turbulence as well as the fully developed state of turbulence.

# **Program**

The program will include a series of plenary lectures and invited contributions by external experts. Regular paricipants may contribute oral or poster presentations, depending on "demand and supply".



# Plenary Lecturers

Prof. Günter Ahlers
University of California Santa Barbara, USA

**Prof. Dwight Barkley**University of Warwick, United Kingdom

**Prof. Herman Clercx**Eindhoven University of Technology, The Netherlands

**Prof. Siegfried Grossmann**Philipps-Universität Marburg, Germany

**Prof. Dan Henningsson**KTH Mechanics Stockholm, Sweden

**Prof. Rainer Hollerbach**University of Leeds, United Kingdom

**Prof. Daniel Lathrop**University of Maryland College Park, USA

**Prof. Detlef Lohse**University of Twente, The Netherlands

**Prof. Tom Mullin**University of Manchester, United Kingdom

Prof. Michael Schatz
Georgia Institute of Technology, USA

**Prof. Laurette Tuckerman** PMMH-ESPCI, France

**Prof. Markus Uhlmann**Karlsruher Institut für Technologie, Germany

**Prof. Roberto Verzicco** Universita di Roma Tor Vergata, Italy

**Prof. Jerry Westerweel**Delft University of Technology, The Netherlands

**Prof. Ke-Qing Xia**The Chinese University of Hong Kong, China

## Scientific Advisory Committee

Prof. Antonio Delgado Universität Erlangen

Prof. Bruno Eckhardt Universität Marburg

Prof. Christoph Egbers BTU Cottbus

Dr. Björn Hof Max-Planck-Institut Göttingen

Prof. Jörg Schumacher Technische Universität Ilmenau

Prof. André Thess Technische Universität Ilmenau

