

Fall School - Agenda

Day 1 (09.10.17)

- 13:00 – 18:30 **Gender equality seminar “Provide constructive feedback in a gendersensible way”, part 1**
Fadja Ehlail, ComAcross - Communication Across Cultures
Felix Schorre, Schorre Consulting
- Coffee breaks: 14:30 – 14:50
16:30 – 16:50

Day 2 (10.10.17)

- 09:00 – 12:30 **Gender equality seminar “Provide constructive feedback in a gendersensible way”, part 2**
Fadja Ehlail, ComAcross - Communication Across Cultures
Felix Schorre, Schorre Consulting
- Coffee break: 10:30 – 10:50
- 12:30 – 13:50 **Lunch**
- 13:50 – 14:00 **Welcome**
Jörg Schumacher, Technische Universität Ilmenau
- 14:00 – 15:15 **Lecture: „Visualization and data processing“**
Rüdiger Westermann, Technische Universität München
- 15:15 – 15:35 **Coffee break**
- 15:35 – 16:50 **Lecture: “Low-dimensional modeling”**
Peter Schmid, Imperial College London
- 16.50 – 17:10 **Coffee break**
- 17:10 – 17:30 **“Incompressible dissipative particle dynamics using a Lagrange-multiplier based algorithm”**
Morgane Borreguero, Technische Universität München
- 17:30 – 17:50 **“Towards exact coherent superstructures in turbulent pipe flow”**
Daniel Feldmann, Universität Bremen
- 17:50 – 18:10 **“Set Oriented Numerics and Embeddings“**
Raphael Gerlach, Universität Paderborn

Day 3 (11.10.17)

- 09:00 – 10:15 **Lecture: “Symmetries in turbulent flows”**
Martin Oberlack, Technische Universität Darmstadt
- 10:15 – 10:35 **Coffee break**
- 10:35 – 10:55 **“Conditional Analysis Near the Surface of the Atmospheric Boundary Layer“**
Katherine Fodor, MPI für Meteorologie Hamburg

- 10:55 – 11:15 **“Should Pipe Flow be Identical or even Similar to Channel and Boundary Layer Flows?”**
El-Sayed Zanoun, Brandenburgische Technische Universität Cottbus
- 11:15 – 11:35 **“Filtered kinetic energy budget in two-dimensional Rayleigh-Bénard convection”**
Gerrit Green, MPI für Dynamik und Selbstorganisation Göttingen
- 11:35 – 13:30 **Lunch**
- 13:30 – 14:45 **Lecture: „Lagrangian coherent structures“**
Daniel Karrasch, Technische Universität München
- 14:45 – 15:05 **„Lagrangian coherent structures in stably stratified turbulence”**
Marius Neamtu, Eidgenössische Technische Hochschule Zürich
- 15:05 – 15:25 **Coffee break**
- 15:25 – 15:45 **“Large-scale contribution to Reynolds shear stress in drag-reduced flows“**
Davide Gatti, Karlsruher Institut für Technologie
- 15:45 – 16:05 **„Lagrangian Coherent Structures and almost-invariant sets“**
Caroline Ziegler, Technische Universität München
- 16:05 – 16:25 **„Mach Number effects on turbulent superstructures in wall bounded flows”**
Matthew Bross, Universität der Bundeswehr München
- 16:25 – 16:45 **Coffee break**
- 16:45 – 17:05 **“Finite-time coherent sets for aperiodic flows”**
Martin Plonka, Freie Universität Berlin
- 17:05 – 17:25 **“Roughness in turbulent Taylor-Couette flow”**
Pieter Berghout, University of Twente
- 17:25 – 17:45 **“Magnetic superstructures in conducting flows”**
Moritz Linkmann, Philipps-Universität Marburg
- 18:30 **Joint dinner at hotel restaurant**

Day 4 (12.10.17)

- 09:00 – 10:15 **Lecture: “Turbulent boundary layers”**
Philipp Schlatter, KTH Royal Institute of Technology Stockholm
- 10:15 – 10:35 **Coffee break**
- 10:35 – 10:55 **“Symmetry induced stability modes of the asymptotic suction boundary layer”**
Judith Kahle, Technische Universität Darmstadt
- 10:55 – 11:15 **“Network theory and coherent structures”**
Christiane Schneide, Leuphana Universität Lüneburg

- 11:15 – 11:35 **“DNS of spatially evolving turbulent boundary layers with focus on adverse pressure gradients and turbulent inflow boundary condition“**
Christoph Wenzel, Universität Stuttgart
- 11:35 – 11:55 **„STB evaluation method, FlowFit and large scale time-resolved 3D measurements of superstructures in a ZPG-TBL“**
Andreas Schröder, Deutsches Zentrum für Luft- und Raumfahrt Göttingen
- 11:55 – 13:30 **Lunch**
- 13:30 – 13:50 **“Turbulent superstructures in Rayleigh-Bénard convection”**
Ambrish Pandey, Technische Universität Ilmenau
- 13:50 – 14:10 **“Inclined Thermal Convection in Slender Containers Filled with Small-Prandtl-Number Fluids”**
Lukas Zwirner, MPI für Dynamik und Selbstorganisation Göttingen
- 14:10 – 14:30 **“Experimental investigation of the heat transport across a sheared thermally unstable boundary layer”**
Gabriele Nunnari, MPI für Dynamik und Selbstorganisation Göttingen
- 14:30 – 14:50 **“Interactive feature-based visualization of Rayleigh-Bénard convection“**
Martin Ender, Technische Universität München
- 14:50 – 15:10 **Coffee break**
- 15:10 – 17:00 **Group discussion on benchmark cases**

Day 5 (13.10.17)

- 09:00 – 09:20 **“Horizontal velocity fields in large aspect ratio turbulent convection”**,
Christian Kästner, Technische Universität Ilmenau
- 09:20 – 10:35 **Lecture: “Turbulent convection”**
Jörg Schumacher, Technische Universität Ilmenau
- 10:35 – 10:50 **Coffee break**
- 10:50 – 12:00 **Final discussion**
- 12:00 **Lunch**

** Lecture, 60 minutes lecture + 15 minutes discussion*

*** Research talk, 15 minutes talk + 5 minutes discussion*

(Whiteboard and beamer available)