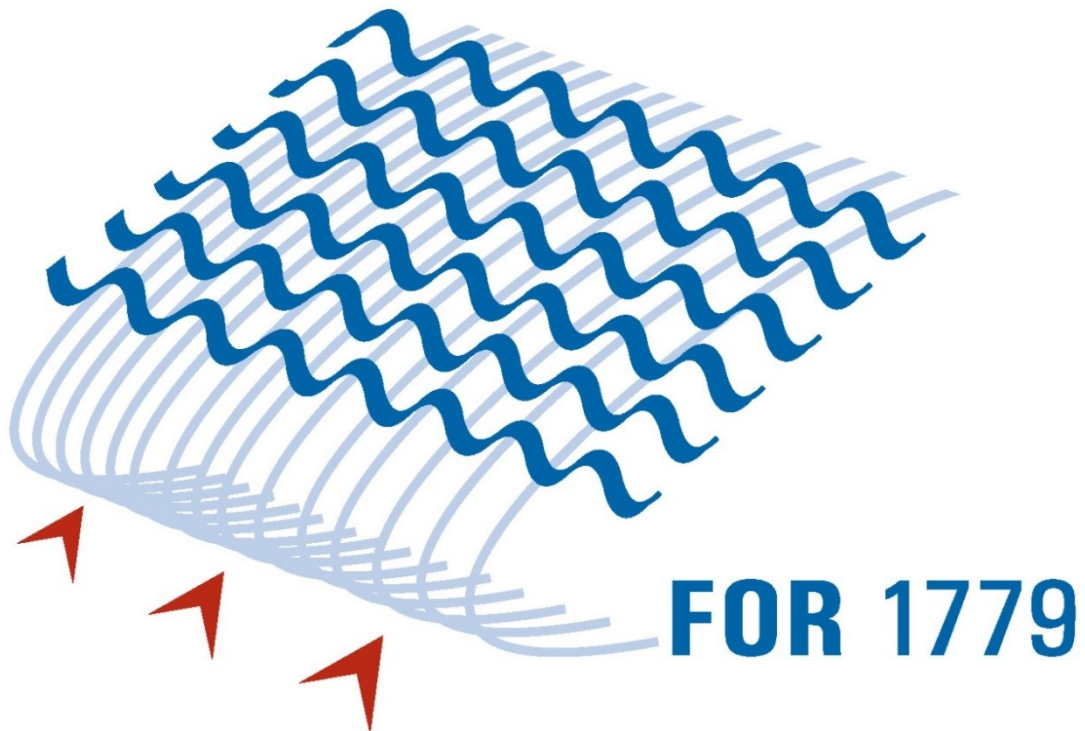


Workshop on Active Drag Reduction

Aachen, Germany, 15-16 March 2018

An interdisciplinary symposium organized by
the DFG funded research unit FOR 1779
RWTH Aachen University, Forschungszentrum Jülich



The symposium will be held at:

NOVOTEL Aachen

Peterstrasse 66
52062 Aachen
Germany

Organizing Committee:

Wolfgang Schröder

Dirk Abel

Michael Klaas

Siegfried Müller

Matthias Meinke

Michael Schiek

Stefan van Waasen

Workshop on Active Drag Reduction

Aachen, Germany, 15-16 March 2018

15 March 2018	
08:30 – 09:00	Registration
09:00 - 09:30	Welcome and Introduction, W. Schröder <i>FOR 1779: Active drag reduction via wavy surface oscillations</i>
09:30 - 10:10	Y. Zhou (HIT Shenzhen) <i>Active drag reduction in a turbulent boundary layer</i>
10:10 - 10:50	S. Bagheri (KTH) <i>Turbulent flow over hairy surfaces</i>
10:50 - 11:20	Coffee Break
11:20 - 11:50	W. Li (RWTH) <i>Experimental investigation of friction drag over moving surfaces</i>
11:50 - 12:20	P. Meysonnat (RWTH) <i>Numerical investigation of friction drag via transversal wavy surfaces motions</i>
12:20 - 13:00	B. Hof (TU Wien) <i>Elimination of turbulence in pipe flow</i>
13:00 - 14:00	Lunch (Novotel)
14:00- 14:40	S. Chernyshenko (Imperial) <i>Questions concerning quasi-steady mechanism of the Reynolds number, pressure gradient, and geometry effect on drag reduction</i>
14:40- 15:10	L. Pyta (RWTH) <i>Reduction of friction drag in subsonic flow via feedback control</i>
15:10 - 15:40	F. Seidler (FZ Jülich) <i>New actuating systems and real-time network simulation for distributed surface actuation</i>
15:40 - 16:10	Coffee Break
16:10 - 16:50	J. Whidborne (Cranfield) <i>Drag Reduction with Extremum Control - Possibilities and Problems</i>
16:50 - 17:30	A. Polyakov (INRIA Lille) <i>Robust Active Flow Control: Sliding Mode Control Approach</i>
17:30 - 18:00	M. Novara (DLR) <i>3D Lagrangian particle tracking with Shake-The-Box in turbulent boundary layer flows</i>
19:30	Dinner (Ratskeller, Markt 40, 52062)

Workshop on Active Drag Reduction

Aachen, Germany, 15-16 March 2018

16 March 2018	
08:30 - 09:10	H. Alfredsson (KTH) <i>Control of bluff body separation using plasma vortex generators - success and surprise</i>
09:10 - 09:40	G. Deolmi (RWTH) <i>Effective boundary conditions for compressible flows over rough boundaries</i>
09:40 - 10:20	W. Dahmen (South Carolina) <i>Multiscale Simulations and Reduced Models</i>
10:20 - 11:00	Coffee Break
11:00 - 11:30	F. Goldschmidtböing (Freiburg) <i>A high stroke and high frequency actuator array for turbulence manipulation</i>
11:30 - 12:10	K. Fukagata (Keio) <i>Resolvent analysis for turbulent friction drag reduction</i>
12:10 - 12:50	B. Noack (CNRS, LIMSI, Orsay) <i>Closed-loop turbulence control using machine and human learning</i>
12:50 - 13:00	Closing
13:00 - 14:00	Lunch (Novotel)

Location:

NOVOTEL Aachen
Peterstrasse 66
52062 Aachen
Germany

Registration:

Wenfeng Li : w.li@aia.rwth-aachen.de

Online:

www.aia.rwth-aachen.de/adr/symposium