

## SCIENTIFIC PROGRAMME

### ERCOFTAC Workshop organised by PC Nordic and ERCOFTAC Da Vinci Competition

KTH Royal Institute of Technology, Main Campus,  
Lindstedtsvagen 26, Stockholm, Sweden

**Venue: F3**

**Thursday, 13<sup>th</sup> October 2016**

09:00 Registration, Coffee

09.40 Welcome and Opening

#### **Invited Lectures**

09:50 Space-time cut finite element method,  
Sara Zahedi, KTH Math., Linné FLOW Centre

10:10 Transition to turbulence control by means of spanwise mean velocity gradients,  
Jens Fransson, KTH Mech., Linné FLOW Centre

10:30 Simulations of suspensions of rigid particles,  
Luca Brandt, KTH Mech., Linné FLOW Centre

**10:50 Coffee Break**

11:20 Towards decoding Centrifugal Compressor Flow Instabilities,  
Mihai Mihaescu, KTH Mech., Linné FLOW Centre

11:40 High-fidelity simulations of turbulence on wings,  
Ricardo Vinuesa, KTH Mech., Linné FLOW Centre

12:00 Some examples of fluid mechanics research activities at Scania,  
Mattias Chevalier, Scania

**12:30 Lunch**

#### **Da Vinci Student Award Presentations**

14:00 Presentation1: Manipulation of 3D Turbulent Wakes: Shear Layer Forcing and Drag Reduction -  
*Diogo Barros, University of Poitiers, France*

14:20 Presentation 2: Hydrodynamics and Thermodynamics of Ice Particle Accretion -  
*Daniel Martin Kintea, Technische Universität Darmstadt, Germany*

14:40 Presentation 3: Application of data assimilation to computational fluid dynamics: from isotropic turbulence to urban flows - *Vincent Mons, University of Sorbonne, France*

**15:00 Coffee break**

15:30 Presentation 4: Direct Numerical Simulations of bubbles in turbulent flows with heat transfer  
*Claudio Santarelli, Technische Universität Dresden, Germany*

15:50 Presentation 5: A homogenization approach for large-scale flows interacting with fine-grained poroelastic media - *Giuseppe A. Zampogna, University of Genova, Italy*

16:10 Panel retires

**16:40 Award Ceremony:** medals, certificates and winner's prize

20:00 Dinner at restaurant .....

WiFi

Account: KTH-Conference

Passwd: fVVCewXNLA

Also eduroam is available

Dinner: 20.00

Beirut Café

Engelbrektsgratan 37

[www.beirutcafe.se](http://www.beirutcafe.se)

Menu (Meze + mixed grill) 450 sek on own expenses

