



**October 16-17, 2017**

# **European Workshop on ROMs for Industrial Applications**

**Politecnico di Torino  
DISMA – Dipartimento di Scienze Matematiche**

**Aula Buzano**

The workshop aims to bring together experts from academia and industry who are proficient in the development of Reduced-Order Models and in their application to real-life problems.

## **ORGANIZING COMMITTEE**

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## **INVITED SPEAKERS**

Olivier Amoignon

ESI Group

Tómas Chacón Rebollo

Universidad de Sevilla

Jean-Christophe Loiseau

ENSAM

Carsten Othmer

Volkswagen AG

Enrico Ribaldone

CRF

Daniele Simoni

Università di Genova

Michel Bergmann

INRIA Bordeaux

Emiliano Iuliano

CIRA

Andrea Manzoni

EPFL

Simona Perotto

MOX-Politecnico di Milano

Gianluigi Rozza

SISSA

Tommaso Taddei

UPMC

## PROGRAMME

### Monday, October 16

14:00 – 16:00	1. <b>A stabilized reduced-basis Smagorinsky turbulence model</b> <i>T. Chacón Rebollo</i>
	2. <b>Application of POD to LES and PIV data for the loss decomposition in turbine cascades</b> <i>D. Simoni</i>
	3. <b>Galerkin-RB-POD Reduced Order Methods: state of the art and perspectives with focus on parametric Computational Fluid Dynamics</b> <i>G. Rozza</i>
16:00 – 16:20	Coffee-break
16:20 – 18:20	4. <b>To be defined</b> <i>C. Othmer</i>
	5. <b>Reduced basis methods for parametrized PDEs: how to enhance efficiency and accuracy in complex problems</b> <i>A. Manzoni</i>
	6. <b>Advection Modes, Geodesics and Model Reduction by Proper Orthogonal Decomposition</b> <i>A. Iollo</i>

### Tuesday, October 17

9:00 – 11:00	7. <b>Reduced Order Modelling: a promising concept for simulation-based design</b> <i>O. Amoignon</i>
	8. <b>A reduced basis technique for long-time unsteady turbulent flows</b> <i>T. Taddei</i>
	9. <b>An overview of POD/ROM applications at CIRA</b> <i>E. Iuliano</i>
11:00 – 11:20	Coffee-break
11:20 – 13:20	10. <b>POD Based Reduced Order Model for CFD Optimization of Vehicle Aerodynamics</b> <i>E. Ribaldone</i>
	11. <b>HiMod solvers in haemodynamics</b> <i>S. Perotto</i>
	12. <b>Overview of sparse reduced-order modelling</b> <i>J.C. Loiseau</i>
13:20 – 14:20	Lunch break
14:20 – 15:00	13. <b>Enablers for efficient sampling and decomposition strategies in hybrid full-order/reduced-order CFD models</b> <i>A. Scardigli</i>
15:00 – 16:00	Final discussion