



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

Tuesday, October 17

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