MINI WORKSHOP
ADVANCES IN NUMERICAL ANALYSIS, SCIENTIFIC COMPUTING AND COMPUTATIONAL MECHANICS

iNδAM
GNCS

July 13, 2015: Room A-128 (1st Floor)

Welcome and Introduction 14:15-14:30

- Virtual Element Spaces – Franco Brezzi 14:30-15:20

- Virtual Element Methods for Advection Diffusion Problems – Donatella Marini 15:20-16:10

- Break 16:10-16:40

- Fluid-structure interaction problems: a new variational formulation for FE-IBM – Lucia Gastaldi 16:40-17:30

- Distributed Lagrangian Multiplier Finite Elements Immersed Boundary Method – Nicola Cavallini 17:30-18:00

July 14, 2015: Room A-004 (Ground Floor)

- Adaptive finite element approximation of mixed eigenvalue problems – Daniele Boffi 9:40 -10:30

- Large-Scale Aerodynamic Shape Optimization using POD-based reduced-order modeling – Angela Scardigli 10:30 - 11:00

- Break 11:00-11:30

- Convergence and optimality of adaptive hp-fem – Claudio Canuto 11:30 -12:20

- IGA-based reduced order model tool for viscous flows in parametrized shapes – Filippo Salmoiraghi 12:20 - 12:50

- Lunch Break 12:50 -14:30 (SISSA Cafeteria/Restaurant/Gardens)

- Reduced order modelling of bifurcation problems with applications to incompressible fluid mechanics – Giuseppe Pitton 14:30 -15:00

- Reduced order models for parametrized problems in computational fluid dynamics– Francesco Ballarin 15:00 -15:30

- Conclusions and Round/Table, Luca Heltai, Gianluigi Rozza 15:30 -16:00