Day 1: 8 July 2024

7:45-8:30	Check in
8:45-9:00	Opening Ceremony *Prof. Melike Nikbay, Istanbul Technical University,* *Dr. Matteo Diez, CNR-INM (National Research Council of Italy)*
9:00-9:45	**Introduction to Advanced Computational Design and Multi-Fidelity Methods** *Prof. Melike Nikbay, Istanbul Technical University*
9:45-10:30	**Introduction to Parametric Projection-Based Model Order Reduction - Part I: Data Collection, Data Compression, Galerkin Projection, Petrov-Galerkin Projection** *Prof. Charbel Farhat, Stanford University*
10:30-11:00	Coffee Break
11:00-11:45	**Introduction to Parametric Projection-Based Model Order Reduction - Part II: Treatment of Parameter Dependence: Linear problems; Nonlinear Problems; Hyper-Reduction.** *Prof. Charbel Farhat, Stanford University*
11:45-12:30	**Active Manifold and Model Order Reduction for Multi-Fidelity Multidisciplinary Analysis and Optimization in High-Dimensional Parameter Spaces** *Prof. Charbel Farhat, Stanford University*
12:30-14:00	Lunch Break
14:00-14:45	**Surrogate Modelling Techniques** *Prof. Edmondo Minisci, University of Strathclyde*
14:45-15:30	**Data Fusion for Multi-Fidelity Modelling** *Prof. Edmondo Minisci, University of Strathclyde*
15:30-16:00	Coffee Break
16:00-16:45	**Multi-Fidelity Optimization and Design Exploration Strategies** *Prof. Edmondo Minisci, University of Strathclyde*
16:45-17:30	**Design-Space Dimensionality Reduction for Shape Optimization** *Dr. Andrea Serani, CNR-INM (National Research Council of Italy)*
17:30	Adjourn

Day 2: 9 July 2024

8:00-8:45	Check in
9:00-9:45	**Multi-Fidelity Bayesian Optimization and Active Learning from Multiple Sources with Goals** *Prof. Laura Mainini, Imperial College London*
9:45-10:30	**Advanced Multi-Fidelity Active Learning Formulations and Applications to Engineering Design Problems in Aeronautics And Space** *Prof. Laura Mainini, Imperial College London*
10:30-11:00	Coffee Break
11:00-11:45	**Benchmark Problems For Multi-Fidelity Methods in Ship Hydrodynamic Optimization and Uncertainty Quantification** *Dr. Andrea Serani, CNR-INM (National Research Council of Italy)*
11:45-12:30	**Uncertainty Quantification in Multi-Fidelity Analysis and Design** *Prof. Markus Rumpfkeil (University of Dayton)*
12:30-14:00	Lunch Break
14:00-14:45	**Robust Design Optimization Using Risk Functions and Multi-Fidelity Methods** *Dr. Domenico Quagliarella, CIRA (Italian Aerospace Research Center)*
14:45-15:30	**A Tutorial on Deterministic and Robust Transonic Airfoil Design with Multi-Fidelity Methods** *Dr. Domenico Quagliarella, CIRA (Italian Aerospace Research Center)*
15:30-16:00	Coffee Break
16:00-16:45	**Multi-Fidelity, Gradient-Based Local Optimization Methods** *Dr. Dean Bryson (US Air Force Research Laboratory)*
16:45-17:30	**Multi-Fidelity Methods in Action: Design Optimization of a Transport Aircraft** *Dr. Philip Beran (US Air Force Research Laboratory)*
17:30-17:45	Closing Remarks *Prof. Melike Nikbay, Istanbul Technical University,* *Dr. Matteo Diez, CNR-INM (National Research Council of Italy)*
17:45	Adjourn