International Workshop on Reduced Order Methods
(22–26 May 2023)

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Name & Affiliation	Title
Weizhu Bao National University of Singapore, Singapore	Modeling, analysis and simulation for degenerate dipolar quantum gas
Zhenning Cai National University of Singapore, Singapore	Linear regularized 13-moment equations for rarefied gas dynamics
Tomas Chacon Rebollo Universidad de Sevilla, Spain	Mathematics-based and physics-based Reduced Basis solution of LES Smagorinsky turbulence models
Xiaoli Chen National University of Singapore, Singapore	Learning reduced stochastic dynamical systems and application in polymer dynamics
Francisco Chinesta École centrale de Nantes, France	Physics-Based and Data-Driven Hybrid Modelling for Decision-making in Critical Urban Systems
Eric Chung The Chinese University of Hong Kong, China	A robust two-level overlapping preconditioner for Darcy flow in high-contrast media
Elias Cueto Universidad de Zaragoza, Spain	Thermodynamics of learning physical phenomena
My Ha Dao A*STAR, Singapore	Reduced Order Modelling (ROM) and Physics-Informed Neural Nets (PINN): Research andApplication
Chenyu Dong National University of Singapore, Singapore	Predictability analysis of weather and climate on reduced manifolds
Matthias Heinkenschloss Rice University, USA	Certified Optimization with Reduced Order Models
Traian Iliescu Virginia Tech, USA	Regularized Reduced Order Models (Reg-ROMs) for Turbulent Flows
Qianxiao Li National University of Singapore, Singapore	Learning parametric Koopman operators for prediction, identification and control

Name & Affiliation	Title
Bo Lin National University of Singapore, Singapore	Computing Committor Functions for the Study of Rare Events Using Deep Learning
Jun Liu A*STAR, Singapore	Modeling and optimization of soft robotic with model order reduction technique through a Graph Neural Network (GNN) encoder
Romit Maulik Argonne National Laboratory, USA	Multiscale Graph Neural Network Autoencoders for Interpretable Scientific Machine Learning
Gianmarco Mengaldo National University of Singapore, Singapore	Data-driven slow earthquake dynamics
Federico Pichi EPFL, Switzerland	A convolutional graph neural network approach to model order reduction for parametrized PDEs
Annalisa Quaini University of Houston, USA	Reduced Order Modeling and LES filtering
Gianluigi Rozza SISSA, Italy	Reduced Order Modelling in Computational Fluid Dynamics: state of the art, challenges and perspectives
Wil Schilders Eindhoven University of Technology, Netherlands	The importance of MOR in the age of HPC and AI
Giovannni Stabile University of Urbino, Italy	Non-Linear Manifold projection reduced order models for parametric partial differential equations with efficient hyper-reduction
Maria Strazzullo Politecnico di Torino, Italy	Model order reduction for parametric optimal control problems: overview and applications
Marco Tezzele The University of Texas at Austin, USA, USA	Recent advances in parameter space reduction
Xin Tong National University of Singapore, Singapore	Likelihood informed subspace
Alessandro Veneziani Emory University, USA	Model Order Reduction in Cardiovascular Clinical Problems: A Case-Study Introduction
Karen Veroy-Grepl Eindhoven University of Technology, Netherlands	Model Order Reduction in the Multi-Scale Materials Setting