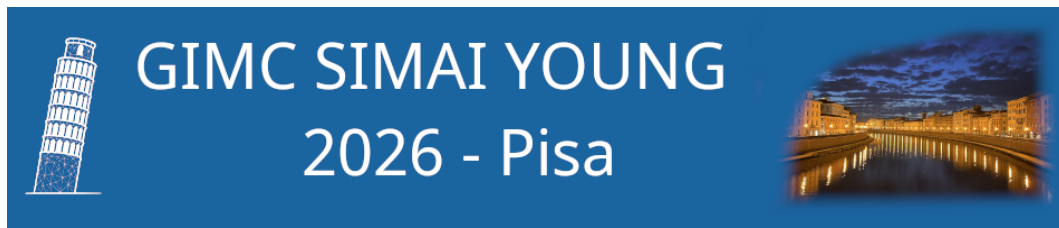


Session Program

3-5 Jun 2026



GIMC SIMAI Young 2026

MS02.2 - Advances in Neural Network Approximation and Surrogate Modeling for Scientific Machine Learning

Pisa

Thursday 4 June

16:30

MS02.2 - Advances in Neural Network Approximation and Surrogate Modeling for Scientific Machine Learning

Session | Location: Pisa

16:30-16:45

Deep Symmetric Autoencoders: Theoretical Framework and Practical Insights

Speaker

Simone Brivio

16:45-17:00

Multi-scale simulations of excitable cells through Finite-Basis PINNs

Speaker

Luca Pellegrini

17:00-17:15

Bridging Numerical Methods and Neural Networks for PDEs

Speaker

Giovanni Pagano

17:15-17:30

Physics Informed Neural networks for downscaling on irregular meshes: successes and limitations

Speaker

Nemo Malhomme

17:30-17:45

Leveraging neural active manifolds for stratified sampling

Speaker

Andrea Zanoni

17:45-18:00

Generative A.I. meets Reduced-Order Modeling: partial knowledge and hidden parameters in physical systems

Speaker

Nicola Rares Franco

18:00-18:15

A COMPARATIVE BENCHMARK OF FINITE VOLUME, REDUCED ORDER, AND PHYSICS-INFORMED SOLVERS FOR FLOW AROUND CYLINDER

Speaker

Hassaan Idrees

18:15-18:30

Machine Learning Surrogates for Robust Inverse Design of Shape-Morphing Elements

Speaker

Silvia Monchetti

18:30