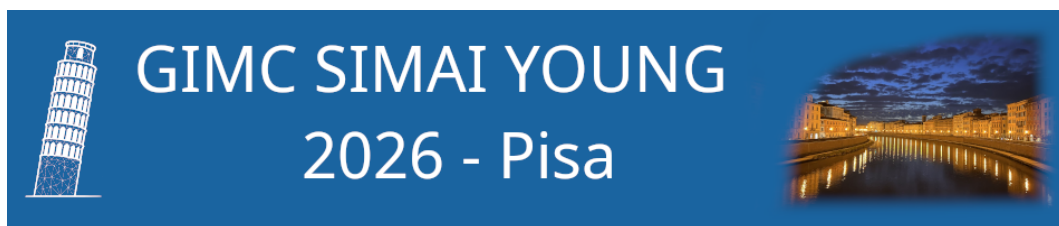


Session Program

3-5 Jun 2026



GIMC SIMAI Young 2026

MS04.2 - High-Order Numerical Methods for Complex Mechanics and Higher-Order PDEs

Pisa

Thursday 4 June

11:15

MS04.2 - High-Order Numerical Methods for Complex Mechanics and Higher-Order PDEs

Session | Location: Pisa

11:15-11:30

Adaptive Isogeometric Analysis of the Cahn-Hilliard Equation with THB-splines

Speaker

Lucas Venta Viñuela

11:30-11:45

A Cahn-Hilliard Equation-based Tumor Growth Model with Nutrient Coupling

Speaker

Dhiraj Sanghaviyay Bombarde

11:45-12:00

Parameter optimization for the Cahn-Hilliard equation with applications to tumor growth models

Speaker

Leonardo Beretta

12:00-12:15

Local h-, p-, and k-Refinement Strategies for the Shifted Boundary Method with THB-Splines

Speaker

Christoph Hollweck

12:15-12:30

A p-adaptive high-order polytopal method for modelling neuronal electrophysiology

Speaker

Caterina B. Leimer Saglio

12:30-12:45

A high-order time and space-accurate method for the explicit dynamics of geometrically exact beams

Speaker

Giulio Ferri

12:45