Research School: Digital Twins of the Human Body

Wednesday, December 10, 2025

IN-DEPTH ALGORITHMIC SESSION: Accelerating Numerical Simulations in CFD by Model Reduction with Scientific and Physics-Informed Machine Learning for Digital Twin(s) - Room 128-129 (2:00 PM - 2:45 PM)

-Conveners: Gianluigi Rozza

time	[id] title	presenter
2:00 PM	[16] Accelerating Numerical Simulations in CFD by Model Reduction with Scientific and Physics-Informed Machine Learning for Digital Twin(s)	Prof. ROZZA, Gianluigi

IN-DEPTH ALGORITHMIC SESSION: Polytopic mesh methods: recent developments and deal.II-based implementation - Room 128-129 (2:45 PM - 3:30 PM)

-Conveners: Pasquale Claudio Africa; Andrea Cangiani

time	[id] title	presenter
2:45 PM	[27] Polytopic mesh methods: recent developments and deal.II-based implementation	CANGIANI, Andrea AFRICA, Pasquale Claudio

Thursday, December 11, 2025

IN-DEPTH ALGORITHMIC SESSION: High-performance finite element algorithms with matrix-free implementations - Room 128-129 (9:00 AM - 9:45 AM)

-Conveners: Martin Kronbichler

time	[id] title	presenter
9:00 AM	[21] High-performance finite element algorithms with matrix-free implementations	KRONBICHLER, Martin

IN-DEPTH ALGORITHMIC SESSION: Scalable and optimal preconditioners for coupled multiphysics problems - Room 128-129 (9:45 AM - 10:30 AM)

-Conveners: Luca Heltai

time	[id] title	presenter
9:45 AM	[24] Scalable and optimal preconditioners for coupled multiphysics problems	HELTAI, Luca

IN-DEPTH ALGORITHMIC SESSION: Recent advances on MUMPS: MUltifrontal Massively Parallel Solver for the direct solution of sparse linear equations - Room 128-129 (11:00 AM - 11:45 AM)

-Conveners: Patrick Amestoy

time	[id] title	presenter
11:00 AM	[22] Recent advances on MUMPS: MUltifrontal Massively Parallel Solver for the direct solution of sparse linear equations	AMESTOY, Patrick