## InterPore2024

# Monday, 13 May 2024

#### <u>MS07: 1.1</u> (11:25 - 12:25)

time	[id] title	presenter
	[157] Simulation of density-driven flow in heterogenous and fractured porous media	WITTUM, Gabriel
	[391] Multilevel Monte Carlo Method for Simulation of Propagation of Uncertainties in Fractured Porous Media	Dr LOGASHENKO, Dmitry
	[347] A Hybrid-Dimensional StokesBrinkmanDarcy Model: Derivation, Analysis and Validation	RUAN, Linheng

# Tuesday, 14 May 2024

## <u>MS07: 2.2</u> (12:00 - 13:00)

time	[id] title	presenter
12:00	[16] A robust two-level overlapping preconditioner for Darcy flow in high-contrast porous media	Prof. CHUNG, Eric
12:15	[915] Exploration of robust and fast L-splitting schemes for nonlinear double degenerate equations	JAVED, Ayesha
12:30	[125] Stable unfitted finite element method for poroelasticity with weak discontinuity	Prof. LIU, Zhijun
12:45	[859] Multiscale Extended Finite Element Method for the Simulation of Fractured Geological Formations	XU, Fanxiang

# Wednesday, 15 May 2024

### <u>MS07: 3.1</u> (10:55 - 11:55)

time	[id] title	presenter
10:55	[532] Thermodynamically consistent modeling and simulation of two-phase flow and multicomponent flow in porous media with rock compressibility	Dr CHEN, Huangxin
	[734] Multiscale modeling of multiphase compressible non-isothermal fluid flow in deformable porous media	ZHENG, Xiaojin
11:25	[461] A Lagrangian Simulation Framework for Multiphase Flow and Transport in Fractured Porous Media	Mr MONGA, Ranit
11:40	[778] Quantifying Uncertainty in the Predictive Power of Multi-Scale Pore-Scale Modeling of Complex Microporous Media	FOROUGHI, Sajjad

### <u>MS07: 3.2</u> (12:00 - 13:00)

time	[id] title	presenter
12:00	[102] Bridging Microscale Physics to Macroscale Models in Confined Porous Media	Dr ARYANA, Saman
	[373] A lattice Boltzmann based Darcy-Brinkman-Stokes method for micro-continuous two-phase flow	Mr LIU, Yang
	[925] Fully coupled implicit discretization for large-scale simulation of miscible multiphase flow in heterogenous porous media	LU, Shuai