InterPore2025 / Programme Monday, 19 May 2025

## InterPore2025

# Monday, 19 May 2025

#### MS09: 1.1 (11:25 - 12:25)

time	[id] title	presenter
	[364] A Multiscale Approach to Pore-Network Two-Phase Flow Simulation Applied to a Carbonate Reservoir	Dr ARENHART, Rafael
	[539] Mechanisms of interface jumps, pinning and hysteresis during imbibition and drainage along an isolated pore	NEPAL, Animesh
11:55	[694] Post-breakthrough evolution of viscous fingers	PRIMKULOV, Bauyrzhan

#### MS09: 1.3 (17:10 - 18:10)

time [id] title	е	presenter
17:10 [268] P	articulate transport in porous media at pore-scale	MAYA, Laurez
17:25 [513] 3	D modeling of Ostwald ripening in multi-component carbon storage	FRANC, Jacques
	Pore-scale level-set simulation of drainage-imbibition cycles of trapped ring decline and incline of reservoir pressure	HELLAND, Johan Olav
17:55 [683] P	Percolation without trapping with time dependency: modelling Ostwald	ADEBIMPE, Ademola

InterPore2025 / Programme Tuesday, 20 May 2025

## **Tuesday, 20 May 2025**

### MS09: 2.2 (11:35 - 13:05)

time	[id] title	presenter
11:35	[11] The Impact of Anisotropic Reaction Rates on Dissolution Dynamics	YU, Siqin
	[37] Multiscale modelling of convection in porous media: experiments, pore-scale and Darcy simulations with dispersion	Dr DE PAOLI, Marco
	[272] Upscale rarefied volatile diffusion in porous media: a probability-based pore network modeling approach	ZHOU, sunpeng
12:20	[475] Pore-scale modeling of reactive transport in complex porous media	MOLINS, Sergi
12:35	[599] Pore-scale reactive transport modeling for heterogenous in-situ carbon mineralization in partially-saturated vesicular basalts	SHEN, Tianxiao
12:50	[183] A variational phase-field model for porous ice and salty water interactions	LIU, Junning

### MS09: 2.3 (14:05 - 15:05)

time [id] title presenter

	• •	•
14:05	[128] Improved stochastic pore network generation algorithms for porous media	SHI, Chengnan
	[382] Characterizing the Morphology and Permeability of Multiscale Pore System of Carbonate Rocks	PERES FERNANDES, Celso
	[461] Anisotropic Permeability Prediction at the pore scale: A Lattice Boltzmann and Machine Learning Approach	Mr BHATTACHARJEE, Soumya Shouvik
	[91] A multi-scale multi-step machine learning method for absolute permeability estimation from porous media low resolution medical-CT images	BUENO, Eduardo

InterPore2025 / Programme Thursday, 22 May 2025

# Thursday, 22 May 2025

### MS09: 4.1 (09:05 - 10:35)

time	[id] title	presenter
09:05	[325] Laminar to Turbulent Convection in Porous Media: The Role of Solid-Fluid Conductivity Ratios and Porosity Variations	SCHWENDENER, Dario
09:20	[44] Influence of particle shape on packing structure and non-linear hydraulic behavior	LI, Jike
	[450] Depth-integrated model of immiscible two-phase flow in open rough fractures	Prof. MÉHEUST, Yves
09:50	[100] Analytical pore-scale modelling of the effect of particle surface roughness on the pressure drop and/or friction factor of granular porous media	VAN VELDEN, Rocco
10:20	[429] Capillary Pressure-Saturation relation derived from the Pore Morphology Method	Dr ALONSO MARROQUIN, Fernando