InterPore2022

Tuesday, 31 May 2022

MS15: Parallel Oral Session 6E (16:30 - 18:00)

time	[id] title	presenter
16:30	[1] Image-based Petrophysical Characterization of Porous Media: A Comparative Study of Common Deep-learning-based Denoising Algorithms	ADISHESHA, Amogh
16:45	[149] Towards Pore Super Segmentation on Artificially Enhanced SEM Images of Opalinus Clay by Voting Classification	Mr BRYSCH, Marco
17:00	[299] Machine/Deep Learning Methods for Pore-Mineral Characterization and Surface Areas Analysis	Mrs ASADI, Parisa
17:15	[448] Fitting correlation-based and neural-network-based relative permeability models to a large dataset of forced and spontaneous imbibition experiments	CIRIACO, Helton Magno
17:30	[48] Estimating permeability of real-rock micro-CT images by physics-informed neural networks	GÄRTTNER, Stephan
17:45	[309] 10,000-cubed Digital Rock Analysis: Beyond Hardware Super Resolution Imaging and Efficient HPC Modelling	WANG, Ying Da

Wednesday, 1 June 2022

MS15: Parallel Oral Session 7E (10:30 - 12:15)

time	[id] title	presenter
10:30	[360] U-FNO - an enhanced Fourier neural operator-based deep-learning model for multiphase flow	Ms WEN, Gege
10:45	[359] Reduced order modeling with Barlow Twins self-supervised learning: Navigating the space between linear and nonlinear solution manifolds	KADEETHUM, Teeratorn
11:00	[341] Physics-enhanced Convolutional Neural Networks for Predicting Effective Dispersion in Porous Media	WEBER, Ross
11:15	[561] Deep Learning Accelerated History Matching and Forecasting for Geologic CO2 Sequestration	Dr CHEN, Bailian
11:30	[101] Data-driven production optimization utilizing multi-objective particle swarm algorithm based on ensemble-learning proxy model	DU, Shuyi
11:45	[159] Data-Driven Physics-informed Interpolation Evolution Combining Historical-Predicted Knowledge for Remaining Oil Distribution Prediction	Mr ZHU, Jingwei
12:00	[284] Upscaling of Realistic Discrete Fracture Simulations Using Machine Learning	ANDRIANOV, Nikolai

Thursday, 2 June 2022

MS15: Parallel Oral Session 10E (09:10 - 10:10)

time	[id] title	presenter
09:10	[555] Machine Learning for Porosity and Absolute Permeability Prediction from Carbonate Rock Images	Mr KALULE, Ramanzani
09:25	[302] Morphology Decoder: Untangling Heterogeneous Porous Media Texture and Quantifying Permeability and Capillary Pressure by Semantic Segmentation	Dr ALFARISI, Omar
09:40	[389] Twisting the ensemble Kalman filter with random forest	Dr A. GODOY, VANESSA
09:55	[354] Semantic segmentation of rock images and ensemble approach for deep learning methods	RINGER, Robert John

MS15: Parallel Oral Session 11E (11:20 - 12:20)

time	[id] title	presenter
11:20	[422] Digital twin of a laboratory-scale porous medium	BOTH, Jakub
11:35	[99] Multi-scale reconstruction of porous media from low-resolution core images using conditional generative adversarial networks	LIU, Fugui
12:05	[397] Stylolite detection and image classification from whole core images using convolutional neural networks	Dr SADEGHNEJAD, Saeid

MS15: Parallel Oral Session 12E (13:30 - 15:15)

time	[id] title	presenter
13:30	[279] The Method Of Solving incompressible Two-phase Seepage Equation In Porous Media By Deep Neural Networks	Dr HAN, JiangXia
13:45	[205] Image-based physics-constraint workflow for multi-phase flow simulation in heterogeneous media	Prof. YAN, Bicheng
14:00	[404] Machine learning to accelerate nonlinear solvers applied to multiphase porous media flow	Mr SANTOS SILVA, Vinicius
14:15	[353] Multiscale modelling of permeability and effective dispersion coefficient in porous media: a deep learning approach	MARCATO, Agnese
14:30	[470] Improving the Performance of Reactive Transport Simulations using Artificial Neural Networks	COENE, Emilie
14:45	[214] Upscaling investigations of dissolution using machine learning and GeoChemFoam	MENKE, Hannah
15:00	[486] A Full Order, Reduced Order and Machine Learning Model Pipeline for Efficient Prediction of Reactive Flows	Prof. ILIEV, Oleg