

August 29 – September 3, 2022

NANCY, FRANCE

Tuesday August 30, Opening - Morning

	auditorium	101	102	105	106
08:30	Opening (08:30)-8:40)		1	
	S0001. 08:40 Philippe Renard Multiple-Point statistics for stochastic modeling of aquifers, where do we stand?				
09:00	Coffee Dreek (
	Collee Break (09:30-10:00)	C17. 0	C00. During the st	607. 0
	smoothers. Filters or smoothers?	elling: Parametrisation and Interpolation of Sub- Surface Architectures	Geostatistics	opments in machine learning techniques and quantum computing	tional Petrology and Geochemistry
10:00	S0901. 10:00	S1301. 10:00	S1701. 10:00	S0201. 10:00	S0701. 10:00
	An open-source software package for the solution of generic inverse problems implementing ES-MDA	Advances in Implicit 3D Geological Modelling using Implicit Neural Rep- resentations	Bind source separation for multivari- ate stationary space-time data	A novel quantum machine learning approach for enhancing sweep effi- ciency mapping	Deducing the composition of Archean continents with a simple model for sediment geochemistry
	S0902. 10:25 Thomas Beraud Ensemble Smoother Multiple Data Assimilation in hydrogeological mod- eling	S1302. 10:25 Gloria Arienti 3D structural geomodelling of com- plexly deformed basement units: the Aosta Valley case study (Western Alps, Italy)	S1702. 10:25 Nikolaos Tziokas Downscaling of Nighttime Lights us- ing Geographically Weighted Area- to-Area Regression Kriging	S0202. 10:25 Daniele Secci Identification of groundwater contam- inant source characteristics through artificial neural network	S07702. 10:25 Rebecca Montsion Statistical optimization for geochem- ical classification of Precambrian ig- neous rocks
11:00	S0903. 10:50 Håkon Tjelmeland Model-based ensemble Kalman filter	S1303. 10:50 Rabii Chaarani A field sampling workflow for Fold Geometry modelling	S1703. 10:50 Sofia Nerantzaki Generating large spatiotemporal pre- cipitation fields moving across a re- gion	S0204. 10:50 Robert Arato FTAIGE: Opportunities and pitfalls in machine-learning-based fission-track analysis	S0703. 10:50 Guillaume Siron Development of a Python GUI appli- cation to automate EQ3/6 computa- tions.
	S0904. 11:15	S1304. 11:15	S1704. 11:15	S0205. 11:15	S0704. 11:15
	David Oakley Structural Geologic Modelling and Restoration by Ensemble Kalman In- version	IMACEDCINE LAOUICI Knowledge-guided process for Se- mantic geological structure detection and representation	Alvaro Hiqueime Simulation of Complex Multivariate Relationships Based on a Non- Stationary Corregionalization Model	Machine learning clinopyroxene ther- mobarometry – a solution for mafic- alkaline systems	NICOIAS HIEI MAGEMin, a new and efficient Gibbs free energy minimizer: application to igneous systems
	S0905. 11:40 Abbas Zerkoune	S1305. 11:40 Michal Michalak	S1705. 11:40 Zhanglin Li	Poster Teasers 11:40 S0207,S0203,	S0705. 11:40 Hua Xiang
12:00	Ensemble-Smoother with Multiple Data Assimilation for Assisted His- tory Matching of Geological Facies using Multi-Point Statistics Pyramid: a Case Study of Turbiditic Multi Fa-	Combinatorial and topological con- siderations for conducting angular distance measurements between ge- ological interfaces	A general geospatial interpolation framework with locally varying anisotropy	S0206	GeoPS: an efficient visual computing tool for thermodynamic modeling of phase equilibria
	Poster Teasers 12:05 S0906	Poster Teasers 12:05 S1308,S1306, S1307	Poster Teasers 12:05 S1706		Poster Teasers 12:05 S0706,S0707, S0708
	Lunch Break (1	2:15-13:40)		-	



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Tuesday August 30, Opening - Afternoon

	auditorium 101		102	105	106		
13:40	S0002. 13:40 Marie-Colette van Lieshout Parametric and non-parametric mon- itoring of induced seismicity in the Groningen gas field		<u></u>		<u> </u>		
	S08: Analyzing compositional data in geosciences	S05: Knowledge graphs in the cyberin- frastructure ecosystem of geosciences	S22: Mathematical Geodynamic	S03: Random patterns and shapes in spatio-temporal data	S02: Recent developments in machine learning techniques and quantum computing		
	S0801. 14:35 Vera Pawlowsky-Glahn Deviations from compositional equi- libria	S0501. 14:35 Xiaogang Ma Temporal topology in the deep-time knowledge base and applications in geoscience	S2201. 14:35 Arnaud Broussolle Mathematical equation recovers ac- celeration of the Supercontinent cy- cle	S0301. 14:35 Tomas Mrkvicka Nonparametric testing of the covari- ate significance under the presence of nuisance covariates for a spatial point pattern	SO210. 14:35 Mojtaba Bavandsavad- koohi SRGAN domain adaptation for super-resolving low-resolution aeromagnetic map: A case study in		
15:00	S0802. 15:00 Alla Sapronova Prediction of the rock mass class with machine learning models trained on synthesised data.	S0502. 15:00 Zhang Qianlong Metallogenic prediction based on Knowledge Graph – Taking pangxi- dong area in western Guangdong as an example	S2202. 15:00 Sophie Viseur Automatic tools for quantitative anal- ysis of multi - scale spatial slip vari- abilities from DEM and DOM	S0302. 15:00 Juha Heikkinen Spatial two-phase systematic cluster sampling with stratification	Social States and the solution of the Richards equation through reduced order modeling		
	Soil organic carbon mapping combining environmental and depth information		Poster Teasers 15:25 S2203, S2204	S0303. 15:25 Claudia Redenbach Estimation of compression parame- ters from the pore system in polar ice			
	Poster Teasers 15:50 S0805, S0804	Poster Teasers 15:50 S0504, S0503					
16:00	Coffee Break (Coffee Break (16:00-16:30)					
	S08: Analyzing compositional data in geosciences	S13: Structural mod- elling: Parametrisation and Interpolation of Sub- Surface Architectures	S17: Spatiotemporal Geostatistics	S03: Random patterns and shapes in spatio-temporal data	S07: Computa- tional Petrology and Geochemistry		
	S0806. 16:30 Karel Hron Compositional scalar-on-function re- gression with application to sedimen- tary geochemistry	S1309. 16:30 Belhachmi Ayoub A spline-based regularized method for the reconstruction of geological models from sparse data	S1707. 16:30 Lucia Clarotto Spatio-temporal modeling with stochastic partial differential equations: simulation and inference	S0304. 16:30 Adina Iftimi Trends in Incidence and Transmis- sion Patterns of COVID-19 in Valen- cia, Spain	S0710. 16:30 Hugo Dominguez Numerical advection schemes for an accurate and efficient modeling of magma ascent		
17:00	S0807. 16:55 Jennifer McKinley Compositional MAF and random for- est analysis of geochemical data to reveal geochemical signatures for sustainable resource availability and environmental resiliance	S1310. 16:55 Nicolas Clausolles Building on 50 years of geomod- elling: walking a tightrope between tradition and clean slate	S1709. 16:55 Claudia Cappello A comparative analysis among the spatio-temporal complex covariance functions for vectorial data	S0305. 16:55 Ottmar Cronie Statistical learning for point pro- cesses	S0711. 16:55 Fan Xiao Numerical modeling of formation of a porphyry-copper ore shell: implica- tions for the mechanism of metal en- richment		
	S0808. 17:20 Behnam Sadeghi Predictive Lithologic Mapping and Prediction of Potential Mineral Re- sources using a Probabilistic Ap- proach with Multivariate Methods: a case study in Wastern Yilaan Aus-	S1311. 17:20 Anne-Laure Tertois Hypersurface curvatures of seismic attributes	S1710. 17:20 Monica Palma Modeling and predictions of spa- tiotemporal environmental data	S0314. 17:20 Christophe Reype Pattern analysis and estimation of parameters for the HUG point pro- cess in order to characterize sources in hydrochemical data	S0712. 17:20 Thorsten A. Markmann Petro-geochemical modelling of sub- duction zone metamorphism: Inter- plays between rock and aqueous flu- ids		
18:00	S0809. 17:45 BingLi Liu Case studies based on CoDA and ML	S1312. 17:45 Laurent Ailleres Loop - An open-source, integrative 3D geological modelling platform	S1711. 17:45 Dionissios Hristopulos Stochastic Local Interaction Models for Space-Time Processes		S0713. 17:45 Antoine Boutier Presentation of Thermotopes-COH, a software for isotopes calculations of C bearing species, and fluid spe- ciation of COH-fluid		
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August 29 – September 3, 2022

NANCY, FRANCE

Wednesday August 31 - Morning

	auditorium	101	102	105	106
08:30	S0003. 08:30 Malcolm Sambridge Optimal transport and Geo- physical inversion		I	I	
09:00					
	Coffee Break (0	9:20-09:50)			
	S04: Inverse problems	S15: Time series analysis in Geosciences: an homage to Professor Walther Schwarzacher	S10: Mining geostatis- tics, optimization and geometallurgy	S03: Random patterns and shapes in spatio- temporal data	S07: Computational Petrology and Geochem- istry
10:00	S0401. 09:50 Jeremie Giraud An iterative inversion scheme to reconcile implicit geologi- cal models and geometric geo- physical inverse problems	S1501. 09:50 Camilla Fagandini A comparison of gap filling methods: a study case in Northern Italy	S1001. 09:50 Joao Pedro De Carvalho High-Order Block-Support Simulation and its Benefits to the Simultaneous Stochastic Optimization of Mining Complexes	S0308. 09:50 Mari Myllymäki False discovery rate envelopes with local spatial correlation and other applications	S0714. 09:50 Arnaud Back Protocol for improving repro- ducibility and image acquisi- tion quality for deep learning application in mineralogy
	S0402. 10:15 Matthias Scheiter New opportunities for Monte Carlo inversion from genera- tive models	S1502. 10:15 Juan Jose Egozcue Rubi Maximum entropy cross- spectral analysis of com- positional time series in cyclostratigraphy	S1002. 10:15 K. Gerald van den Boogaart Future Knowledge in Geomet- allurgical Mining Optimiza- tion	S0309. 10:15 Elmo Tempel Marked point processes for as- tronomical applications	S0715. 10:15 Tom Sheldrake Segmentation and correlation of zoned crystals from 2D chemical compositional maps
11:00	S0403. 10:40 Augustin Gouy Inverting an Object Based geo- statistical facies model with Ensemble Smoother Mutiple Data assimilation technique.	S1503. 10:40 Thomas Romary Oxygen data assimilation in river systems	S1003. 10:40 Christophe Bessin Geostatistics and Machine Learning for anticipation of production impairments An application to the Grande Côte Operations HM deposit,	S0310. 10:40 Matthias Eckardt ^{Object-valued marked point} processes	S0716. 10:40 Angela Rodrigues Machine supported mineralog- ical interpretations from hy- perspectral and geochemical datasets
	S0404. 11:05 Alexis Neven Stochastic joint inversion to improve model uncertainty quantification in Quaternary aquifers	S1504. 11:05 Bateer Wu Seismicity since 1500 in Hunan Area China	S1004. 11:05 Nasser Madani Geostatistical Domaining ac- counting for Geological Knowl- edge and Rock Quality in a Copper Porphyry Deposit	S0307. 17:45 Samuel Soubeyrand Construction of spatio- temporal networks from trajectory data - Application to infer tropospheric networks	S0717. 11:05 Alberto D'Agostino Supported development and application of machine- learning models on mineral X-ray maps: the software X-Min Learn
	S0405. 11:30 Guillaume Siron Implementation of a Markov- Chain Monte Carlo algorithm for high temperature thermal history inversion using the Fast Grain Boundary model	Poster Teasers 11:30 S1506	S1005. 11:30 Javier Órdenes Incorporation of Sequential Gaussian Simulation into Dis- crete Rate Simulation for Con- trol of Cyanide Consumption in Au-Ag Vein Mining	Poster Teasers 11:30 S0313,S0311, S0312	S0718. 11:30 Nils Benjamin Gies Two-dimensional thermo- dynamic forward model of water transport in subduction zones to calculate the globally subducted water – a tool
12:00	Poster Teasers 11:55 S0407,S0406, S0408		Poster Teasers 11:55 S1008,S1007, S1006		Poster Teasers 11:55 S0719,S0721, S0720
	Lunch Break (1	2:05-13:40)			

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International Association for Mathematical Geosciences

21st annual conference

August 29 – September 3, 2022

NANCY, FRANCE

Wednesday August 31 - Afternoon

	auditorium	101	102	105	106
13:40	S0004. 13:40 John Carranza Muti-scale Spatial Patterns of Min- eral Deposits: Their Exploration Sig- nificance				
14:00					
	S04: Inverse problems	14:30-15:00) S20: Meshing and simulation of subsurface processes	S10: Mining geostatistics, optimization and geometallurgy	S14: Machine learning-based mineral prospectivity mapping	S02: Recent developments in machine learning techniques and
15:00	S0409. 15:00 Buse Turunctur Overcomplete Tomography: A spar- sity constrained approach to inver- sion	S2001. 15:00 Capucine Legentil Local 3D meshed geomodel updat- ing: geometry and topology	S1009. 15:00 Mengyu Zhao A Hybrid Method for Quantifying Anisotropic Scale Invariance of Geo- chemical Anomalies and Identify- ing Multi-element Anomalous Signa- ture of Cur-Polymetallic Deposits in	S1401. 15:00 Alok Porwal Machine learning in Prospectivity Modeling: Feature Engineering, Se- lection and Integration	guantum computing S0212. 15:00 Bahman Abbassi Feature subset selection for linea- ments detection
	S0410. 15:25 Stan Dosso Bayesian inversion and uncertainty quantification in seabed geoacous- tics	S2002. 15:25 Marius Rapenne Quadrangular adaptive meshing for wave simulation in homogenized me- dia	S1010. 15:25 Ilnur Minniakhmetov Utilising local varying anisotropy in the multivariate conditional simula- tion model of Olympic Dam deposit	S1402. 15:25 Malcolm Aranha Automated regional-scale explo- ration targeting of REEs in western Rajasthan, northwest India.	S0213. 15:25 Yongguang Zhu Prediction of China's Copper Avail- ability through a Machine Learning Framework
16:00	S0411. 15:50 Lea Friedli Inference of geostatistical hyperpa- rameters with the correlated pseudo- marginal method	S2003. 15:50 Zoe Renat Application of time reversal simula- tion with an homogenized velocity model: Case of Groningen gas field.	S1011. 15:50 Sultan Abulkhair Comparison of multiGaussian trans- forms in multivariate geostatistical simulation	S1403. 15:50 Bijal Chudasama Exploration targeting at the Rajapalot Au-Co project in Finland – Applica- tion of machine learning methods for identification and prioritization of drilling targets at the prospect scale.	S0214. 15:50 Zhe Wang Application and Evaluation of a Deep Learning Architecture to Urban Tree Canopy Mapping
	S0412. 16:15 Nicola Piana Agostinetti Geophysical data-mining using trans- dimensional algorithms: the case- study of earthquakes location	S2004. 16:15 Wan-Chiu Li Hexahedral grid honoring complex faults and wells for coupled flow- geomechanics simulations	S1012. 16:15 Sebastian Avalos Multivariate morphing transforma- tion: Fundamentals and challenges	S1404. 16:15 Andreas Brosig Hybrid mineral predictive mapping with self-organizing maps and a mul- tilayer perceptron applied to tin de- posits in the Erzgebirge, Germany	
17:00	S0413. 16:40 Nisar Ahmed Time-lapse seismic AVO inversion method by using Gradient descent optimization	S2005. 16:40 Margaux Raguenel Optimal hybrid mesh for flow simula- tions	S1013. 16:40 Marie-Cécile Febvey Application of SPDE method to a continental-fluvial uranium ore body and comparison with classical meth- ods	S1405. 16:40 Alex Vella Predictivity modelling from multi- variate environments coupling Disc- Based Association and Random For- est analyses	
	Poster Teasers 17:05 S0415,S0416, S0414	Poster Teasers 17:05 S2008,S2007, S2006	Poster Teasers 17:05 S1016, S1015	Poster Teasers 17:05 S1406 - S1410	

Poster Session and Drinks (17.15-19:00)

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Thursday September 01 - Morning

	auditorium	101	102	105	106	
08:30	S0005. 08:30 Qiuming Cheng Quantitative simulation and predic- tion of extreme geological events			1		
09:00						
	Coffee Break (09:20-09:50)				
	S16: Reservoir/Petroleum deorstatistics	S21: Landscape evolution models: tectonics, relief, climate	S18: Uncertainty Modeling	S14: Machine learning-based mineral prospectivity mapping	S01: Beyond Gaussianity: GANs, MPS, Cumulants or Copula approaches?	
	S1601. 09:50	S2101. 09:50	S1801. 09:50	S1411. 09:50	S0101. 09:50	
10:00	Fast Detection of Geobodies in 3D Seismic with Unsupervised Segmen- tation	Data science for complex earth sys- tems: A hybrid approach	Can we parameterize geological con- ceptual models in a continuous space?	A geologically-constrained deep learning algorithm for mapping mineral prospectivity	Multiple-point based simulation and estimation with uncertain data	
	S1602. 10:15 Julien Herrero A Bayesian methodology for real- time updating of well trajectory in de- positional space	S2102. 10:15 Clement Narteau Recent advances in dune physics us- ing a real-space cellular automaton laboratory	S1802. 10:15 Fabrice Taty Moukati Two dimensional seismic fault net- work interpretation using marked point processes	S1412. 10:15 Xuechao Wu Research on metallogenic prediction method based on multi-scale 3D fine geological model and big data mining	Sollo2. 10:15 Zhesi Cui Characterization of subsurface hy- drogeological structures with convo- lutional conditional neural processes on limited training data	
11:00	S1603. 10:40 Ismael Dawuda A model selection workflow for as- similating time-lapse seismic data in models for point bar geologic system.	S2103. 10:40 Mustapha Zakari A Schaerfetter-Gummel based model for glacier modeling	S1803. 10:40 Sofia Brisson Linking Implicit Geometric and Kine- matic Modeling of the Eastern Alps for Uncertainty Estimation	S1413. 10:40 Yang Zheng Spatial-associated deep transfer learning for three-dimensional mineral prospectivity modeling in deep-seated areas	S0103. 10:40 Julien Straubhaar Multiple-point statistics in unstruc- tured grids	
	S1604. 11:05 Mina Spremic Bayesian Seismic Rock Physics In- version Using the Local Ensemble Transform Kalman Filter	S2104. 11:05 Erin Bryce Unified landslide hazard assessment using hurdle models: a case study in the Island of Dominica	S1804. 11:05 Susan Anyosa Assessment of geophysical monitor- ing strategies for CO2 storage using ensemble-based methods and value of information analysis	Sheng Chang Geochemical Anomaly Detection Based on Auto-encoder Network	S0104. 11:05 Thomas Bodin Downscaling tomographic models using multi-point statistics	
	S1605. 11:30 Jeff Boisvert Bayesian inversion with shortest lo- cally varying anisotropic (LVA) paths	S2106. 11:30 Arnaud Broussolle Mathematical equation recovers ac- celeration of the Supercontinent cy- cle	S1805. 11:30 Nicolas Clausolles Stochastic velocity modeling for structural uncertainty assessment during migration: application to salt body imaging	S1415. 11:30 Gunes Ertunc CoalSVModel: A MATLAB GUI for Coal Seam Modelling with Support Vector Machines	S0105. 11:30 Guanghui Hu Downscaling of digital elevation mod- els by using a multiple-point statistics approach	
12:00	Poster Teasers 11:55 S1606,S1607, S1609	Poster Teasers 11:55 S2105,S2107, S2108, S2109	Poster Teasers 11:55 S1807, S1806	Poster Teasers 11:55 S1418, S1416	Poster Teasers 11:55 S0106	

Lunch Break (12:15-13:40)

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Thursday September 01 - Afternoon

	auditorium	101	102	105	106		
13:30		1]		
	Poster Session (13:30-14:30)						
14:00							
	Coffee Break (14:30-15:00)					
	S20: Meshing and simulation of subsurface processes	S12: Spatial Associations	S10: Mining geostatistics, optimization and geometallurgy	S14: Machine learning-based mineral prospectivity mapping	S02: Beyond Gaussianity: GANs, MPS, Cumulants or Copula approaches?		
15:00	S2009. 15:00 Tara LaForce	S1201. 15:00 Zehua Zhang	S1017. 15:00 Will Patton	S1421. 15:00 Yihui Xiong	S0108. 15:00 Guillaume Rongier		
	Automated Meshing for Simulations of Subsurface Contaminants	Identifying Spatial Disparities of Power-law Scaling in Nation-wide Industrial Regions	Modelling of Unequally Sampled Ge- ometallurgical Properties using Geo- statistical Simulations and Machine Learning	The behavior of hydrothermal miner- alization with spatial variations of the fluid pressure	Lessons learned from simulating flu- vial deposits using process-based models and generative adversarial networks		
	S2010. 15:25 Antoine Mazuyer	S1202. 15:25 Xilin Wu	S1018. 15:25 Abdelkerim Mokdad	S1422. 15:25 Xiaotong Yu	S0109. 15:25 Chao Sun		
	Evaluation of mesh quality for CO2 geological sequestration	Reconstruct the Fine-resolution Urban Apparent Temperature (Humidex) Combined with Canopy Parameter	Automatic Variogram Inference Us- ing Convolutional Neural Networks (CNN)	Deep Auto-encoder applied to map- ping prospectivity for Ag-Au deposits	What can GAN learn from depo- sitional patterns to build 3D facies models?		
	S2011. 15:50 Stephan Matthai	S1203. 15:50	S1019. 15:50	S1423. 15:50	S0110. 15:50 Ferdinand Bhaysar		
16:00	Reduced-Order Modelling of Tabu- lar Sand Bodies for Performance As- sessment Simulations of CO2 Stor- age Sites	Holographic Digital Earth	Self-organizing maps in analyzing hyperspectral drill core imaging data	Extraction of Weak Geochemical Anomalies Based on Multiple-Point Geostatistics and Local Singularity Analysis	Deep-learning spatial generation of geological facies		
	S2012. 16:15 Nathan Amrofel	S1204. 16:15 Chaosheng Zhang	S1020. 16:15 Julian M. Ortiz	S1424. 16:15 Ehsan Farahbakhsh	S0111. 16:15 Mathieu Gravey		
	Numerical modeling of gas drainage and drying in nanoporous media by SPH method	Understanding spatially varying rela- tionships in environmental studies	Inferring parameters of 3D particles microstructures from 2D sections using statistical learning	Positive and unlabelled bagging for mineral prospectivity mapping	Should we use Machine Learning to get Geostatistical realization?		
	S2013. 16:40 Kaigi Wang	S1205. 16:40 Chen Genshen	S1021. 16:40 Angela Bodrigues		S0112. 16:40		
17:00	A coupled numerical simulation model of heat and flow for the dynamic process of porphyry magma intruding-cooling based on phase transformation	Key Technologies of Multiscale 3D Geological Model Database for Re- source and Environment Big Data In- tegration and Sharing	Pedras 1.0.0: A Python library for modal mineralogy calculations from routine assay data		Three-dimensional Geological Struc- ture Reconstruction with Multiple- point Statistics Method Guided by ANN: A Case Study of Metro Station in Guanozhou, China		
	IAMG General	Assemblev (17.	15-18.15)				
			10 10.10/				
	Conference Dinner (19:30)						

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August 29 – September 3, 2022

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Friday September 02, Closing - Morning

	auditorium	101	102	105	106
08:30	S0006. 08:30 Colin Daly Interpolations, realizations and sce- narios - using ML spatially without big data			1	
09:00	Coffee Breek (
	Collee Dreak (J9.20-09.50)	0.40	000	0.40
	S16: Reser- voir/Petroleum Geo- statistics	S11: Preserving real- istic geology in statistical and mathematical geo- models	S10: Mining geostatis- tics, optimization and geometallurgy	S06: Fractured geolog- ical media and fracture networks: flow, graphs, morphology	S19: Up-Scaling of Flow and Transport Models
	S1610. 09:50	S1101. 09:50	S1022. 09:50	S0601. 09:50	S1901. 09:50
10:00	FIGHTE BIVER Facies modeling using unstructured grid, a groundwater field case: the Roussillon coastal aquifer.	Marion Parquer Checking for geological truth in our 3D models; a knowledge based ap- proach	Harold Velasquez Graph Theory Tools for Hierarchical Analysis of Rock Types	Hayan Kaniar Stochastic Geomodelling of Karst Morphology by Dynamic Graph Dis- solution	Reservoir characterization by graphs.
	S1611. 10:15 Suihong Song GANSim-3D for conditional geomod- elling: theory and field application	S1102. 10:15 Jean-Claude Dulac Constrained, process-based, stochastic, explicit revervoir modelling - One step at a time.	S1023. 10:15 Katherine Silversides Mineral and lithology classification on Ernest Henry Au-Cu deposit using hyperspectral and RGB data	S0602. 10:15 Rachid Ababou Exact algebraic approach to flow cal- culation and permeability upscaling in 2D fracture networks using graph operators	S1902. 10:15 Mustapha Zakari Upscaling permeability from unstruc- tured meshes to non-matching struc- tured grids. First results
11:00	S1612. 10:40 Minsoo Ji Generation of Synthetic Com- pressional Travel Time using Well-Logging-Learning Model and Its Application to the Ulleung Basin Gas Hydrate Field Benuhling of Korea	S1103. 10:40 Oscar Ovanger A rule-based reservoir stacking model with effective well conditioning	S1024. 10:40 Julian M. Ortiz Definition of Geological Domains with Ensemble Support Vector Clas- sification	S0603. 10:40 Francois Bonneau Statistical analysis and stochastic simulation of Fracture Networks	S1903. 10:40 Quentin C. Courtois Comparison between ECPM and DFN approach for fractured media flow and transport simulation.
11:00	S1613. 11:05 Jonas Kloeckner Quantifying Uncertainty in 3D Facies Modeling Using MCRF with Lateral Gradational Fields	S1104. 11:05 Alan Troncoso Conditional simulations of process- based reservoir models using parti- cle filtering: application to Loranca basin, Spain	S2401. 11:05 Reeves M. Fokeng Plantations and ecosystem transi- tion in the Santchou landscape of Cameroon: A hybrid remote sensing analysis	S0604. 11:05 Israel Cañamón Valera TOP 3D: Topological analysis of 3D fracture networks, graph representa- tion, and percolation	S1904. 11:05 Benoit Noetinger About non-linear diffusion in porous and fractured1 media: Early- and late-time regimes
	S1614. 11:30 Seoyoon Kwon Sequential Determination of Well Placements using Multi-modal Con- volutional Neural Network for the Op- timal Primary Recovery at an Oil Recervoir	S1105. 11:30 Augustin Gouy Discrete karst network simulations: application to the Barrois limestones	S2402. 11:30 Bakul Budhiraja Statistical Investigation of surface ur- ban heat island inequality within a city	S0605. 11:30 Andrea Bistacchi Modelling realistic fracture networks in a mechanically multilayered se- quence: constraints from field obser- vations and numerical modelling	S1905. 11:30 Narges Dashtbesh Non-Aqueous Phase Liquid Dissolu- tion in Porous Media: Upscaling the Mass Exchange Coefficient
12:00	S1615. 11:55 Jiayi Ma Multifractal-based Quantitative Char- acterization of Micropore Structures in Burial Dissolution of Carbonate Reservoirs	S1106. 11:55 Fernanda Alvarado Neves Three dimensional modelling of ig- neous sills: application to the Tasma- nian dolerites in the Hobart district	S2403. 11:55 Bjorn Birnir Timing of Global Change	S0606. 11:55 Israel Cañamón Valera Optimization of boreholes positions to maximize flux rate in a 3D Discrete Fractured Medium	S1906. 11:55 Simon Cazaurang Numerical assessment of thermo- hydraulic properties of Sphagnum moss, lichen and peat from a permatrost-dominated Arctic wetland
	Lunch Break (1	2:20-13:50)	S24: Climate and Land Use		

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August 29 – September 3, 2022

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Friday September 02, Closing - Afternoon

	auditorium	101	102	105	106
13:50 14:00	S0007. 13:50 Bruno Lévy Computational optimal transport		1	1	I
	S23: Digital Outcrops		S18: Uncertainty Modeling	S06: Fractured geolog- ical media and fracture networks: flow, graphs, morphology	S01: Beyond Gaussianity: GANs, MPS, Cumulants or Copula approaches?
15:00	S2301. 14:40 Stefano Casiraghi A semi-automatic workflow for frac- ture network characterization on large Digital Outcrop Models		S1808. 14:40 Gautier Laurent A Geocognitive Approach to Epis- temic Uncertainty Exploration	S0607. 14:40 Pierre Biver Fracture and karst modeling: an em- bedded workflow including fracture abutting and permeability enhance- ment with karst.	S0113. 14:40 Claus Haslauer Copula-Based Geostatistics: Recent Developments and Geo-Hydrological Applications
	S2302. 15:05 Athanasios Nathanail Applying Image Analysis and Seg- mentation on Outcrop Data		S1809. 15:05 Vitor de Sá Combination of hierarchical cluster- ing and geostatistical simulation for delineating Au rich zones and inter- pretating ore generation process in an epithermal vein-type deposit	S0608. 15:05 Mark Jessell Graph-based scenario-testing of fluid pathways in 2D & 3D	S0114. 15:05 Lingqing Yao A Multiple-Point Statistical Descriptor Measuring High-Order Spatial Data Consistency
	S2303. 15:30 Sylvain Favier Automated structural characteriza- tion and DFN modelling of a frac- ture network from an outcrop LiDaR dataset		S1810. 15:30 Gleb Shishaev Uncertainty Quantification of de- positional and structural properties with Generative Deep Learning and Graph Convolutions		S0115. 15:30 Zihan Ren Porous media reconstruction condi- tioned to well information using multi- modal generative adversarial net- works (GANs)
16:00	S2304. 15:55 Bijal Chudasama Convolutional neural networks for au- tomated mapping of bedrock fracture traces from UAV-acquired images.		S1811. 15:55 Paul Baville Computer-assisted stochastic multi- well correlation: Depositional surface interpolation versus theoretical depo- sitional profile		Sollia. 15:55 Sangga Rima Roman Selia Direct Sampling Strategy for Exten- sive Hard Data-based Training Image
	Coffee Break (16:25-16:50)			

Closing (16:50-17:30)

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Poster list IAMG 2022

S0203	30.08. 11:44	Musaab	Khalid	On the application of NLP techniques to French geological descriptions
S0206	30.08. 11:40	Malte L.	Schade	Quantum Computing for Open-Pit Optimization
S0207	30.08. 11:42	Magued	Al-Aghbary	A geothermal heat flow model of Africa based on Random Forest Regression
S0311	31.08. 11:05	Didier	Gemmerle	DRlib: a C++ library for point processes simulation and inference
S0312	31.08. 11:07	Kristoffer V.	Olesen	Detecting Abnormal Maritime Trajectories with Recurrent Neural Networks
S0313	31.08. 11:09	Moorits M.	Muru	Detecting large-scale structure of the Universe using photometric data with the Bisous model
S0406	31.08. 11:55	Shiran	Levy	Efficient inversion with complex geostatistical priors using neural transport
S0407	31.08. 11:57	Macarena	Amaya	Hydrogeological multiple-point statistics inversion by adaptive sequential Monte Carlo
S0408	31.08. 11:59	Jiawen	Не	CoFI - Linking geoscience inference problems with tools for their solution
S0414	31.08. 17:05	Mahtab	Rashidifard	Using deep learning to model gravity and seismic datasets with different spatial coverage
S0415	31.08. 17:07	Khalid	Essa	A full interpretation applying a metaheuristic particle swarm for gravity data of an active mud diapir, SW Taiwan
S0416	31.08. 17:09	Khalid	Essa	Magnetic data interpretation for intruded bodies resembled dike-model using Bat algorithm optimization (BAO): sustainable development cases study
S0503	30.08. 15:50	Leon	Steinmeier	A metadata and data entry and editing tool using ontologies for knowledge graph creation
S0504	30.08. 15:52	Xiaogang	Ма	A Multi-granularity Geological Objects (Multi-GeoO) Knowledge Representation Framework
S0706	30.08. 12:05	Philip	Hartmeier	A Convolutional Neural Network to classify garnet grains in 3D
S0707	30.08. 12:07	Pierre	Lanari	Classification of chemical maps in XMapTools – Part 1: algorithms and strategy
S0708	30.08. 12:09	Mahyra	Tedeschi	$Classification \ of \ chemical \ maps \ in \ XMapTools - Part \ 2: \ performance \ evaluation \ and \ application \ examples$
S0719	31.08. 11:55	Solveig	Pospiech	From data to model: Microstructure aware models for reactive transport in granitoid rocks
S0720	31.08. 11:57	Nils B.	Gies	Presenting a new tool for working with spatial spectroscopic data
S0721	31.08. 11:59	Thorsten A.	Markmann	Quantitativecompositional mapping by LA-ICP-MS: a software solution for multiphase application
S0804	30.08. 15:50	Tom	Sheldrake	Classification of mineral grains using finite mixture models
S0805	30.08. 15:52	Behnam	Sadeghi	Compositional-Category-Based modeling: a new insight for geochemical anomaly classification
S0906	30.08. 12:05	Alicia	Sanz-Prat	Coupling optimization and the ensemble Kalman filter for multiple source contaminant identification
S1006	31.08. 11:55	Zahra	Nourizenouz	Application of machine learning to predict gold recovery at the Sari-gunay deposit, Iran
S1007	31.08. 11:57	Katherine	Silversides	Predicting hardness in iron ore blast holes using MWD
S1008	31.08. 11:59	Raimon	Tolosana Delgado	Modelling microstructures with flexible Laguerre Mosaics
S1015	31.08. 17:05	Marie-Cécile	Febvey	Use of the specific surface to measure the efficiency of grids of drillholes and classify the resources of a set of 2D mineral deposits.
S1016	31.08. 17:07	Rob	Wall	Geoscience workflows using ioGAS Software

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S1306	30.08. 12:05	Lachlan	Grose	A Bayesian framework for the inversion of geological maps for fault geometry
S1307	30.08. 12:07	Guillaume	Caumon	On some comparison metrics between 3D implicit structural models.
S1308	30.08. 12:09	Ranee	Joshi	Subsampling Structural Data for Multiscale 3D Geological Modelling
S1406	31.08. 17:05	Andreas	Brosig	Artificial Intelligence (AI) based Exploration Targeting for Small Scale Gold Mining Operations in the Dunkwa Area, Ghana
S1407	31.08. 17:07	Marion	Parquer	Data integration and machine learning applications on the unconformity-related uranium mineral system of Athabasca basin
S1408	31.08. 17:09	Ehsanollah	Baninajar	Developing a Unified Exploration Model using a Bayesian hierarchical framework
S1409	31.08. 17:11	Feng	Han	Entity and Relationship Extraction From Geological Document Based on The Method of Deep Learning
S1410	31.08. 17:13	Hugo	Breuillard	Mineral Prospectivity Mapping Using a Combination of Cell-Based Association and Gradient Boosting Methods: Investigating Gold Occurrences in French Brittany
S1416	01.09. 11:55	Xuechao	Wu	Study on metallogenic prediction method based on multi-scale three- dimensional fine geological model and big data mining——Taking Wuzhishan lead zinc mine in Guizhou Province as an example
S1418	01.09. 11:57	Haicheng	Wang	Discrimination of geochemical anomalies using geological constraints and geochemical landscape modeling
S1506	31.08. 11:30	Sadeg	Said	Sorting signals recorded during EDX experiments
S1706	30.08. 12:05	Dionissios	Hristopulos	Stochastic Local Interaction Models for Gap Filling of Gridded Datasets
S1606	01.09. 11:55	Amir M.	Latifi	Comparing Uncertainty Quantification Between 2D and 3D Geostatistical Modeling Workflows
S1607	01.09. 11:57	Enrico	Scarpa	Dynamic connectivity measures on turbidite channel complex architectures
S1609	01.09. 11:59	Thomas	Jerome	How to capture high-resolution continuous facies geobodies across wells in a geomodeling workflow? Example from an outcrop and from a subsurface dataset from the Western Canadian Sedimentary Basin
S1806	01.09. 11:55	Raphaël	Périllat	Accounting for uncertainties in soil pollution simulation by metamodeling
S1807	01.09. 11:57	Ludovic	Schorpp	Automated hierarchical 3D modeling of Quaternary aquifers - the ArchPy approach
S2006	31.08. 17:05	Paul	Cupillard	High-order homogenization for simulating local effects of small-scale structures on seismic waves
S2007	31.08. 17:07	Jumanah	Al Kubaisy	Hybrid pressure approximation for coupled flow and transport in heterogeneous porous media
S2008	31.08. 17:09	Anne-Julie	Tinet	Numerical pore-scale modeling of dilatant gas flow using a coupled LBM-spring model and interpolated bounce-back boundary
S2105	01.09. 11:30	Alex	Lipp	Inverting two-dimensional landscapes for uplift histories
S2203	30.08. 15:25	Helmut	Schaeben	Absolute and relative motion of three tectonic plates assuming two fixed Euler poles: I. Rotation of plates with quaternions
S2204	30.08. 15:27	Uwe	Kroner	Absolute and relative motion of three tectonic plates: II. Applications

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