WEDNESDAY 18 MARCH

SEISMIC IMAGING AND INVERSION METHODS

Time	Presentation
8:30 - 9:10	**Arrival tea and coffee**
9:10 – 9:30	Integrated Seismic Imaging Of Crystalline Crust In Canada's Superior Archean Province: Progress With The Metal Earth Project (WebEx) ***M. Naghizadeh***[1] [1]*Laurentian University*

NEW DEVELOPMENTS AND ADVANCES IN DAS APPLICATIONS

Chair: S. Buske 9:30 – 9:50	Surface Seismic For Mineral Exploration Using Distributed Acoustic Sensing ***A. Bona****, S. Ziramov, R. Pevzner, K. Tertyshnikov, M. Urosevic* *Curtin University*
9:50 – 10:10	P-Wave Anisotropy Estimation From 3D VSP Data Acquired With Geophones And DAS At Otway Site ***S. Popik***[1,2]*, R. Pevzner*[1,2]*, A. Bona*[1,2] [1]*Curtin University,* [2]*CO2CRC*

SEISMIC IMAGING AND INVERSION METHODS

Chair: M. Urosevic 10:10 – 10:30	Seismic Images Of The Upper Crust In Northern Finland ***S. Buske***[1]*, S. Heinonen*[2]*, F. Hlousek*[1]*, T. Jusri*[1]*, E. Kozlovskaya*[3] [1]*TU Bergakademie Freiberg* [2]*Geological Survey of Finland* [3] *University of Oulu*
10:30 – 11:00	**Morning Tea**
11:00 – 11:20	Shallow Active-Source Seismic Tomographic Modeling In 2-D And 3-D Of Old Faithful Geyser In The Upper Geyser Basin Of Yellowstone National Park ***J. R. Caylor***[1]*, M. Karplus*[1]*, J. Farrell*[2]*, J. Chaput*[1]*, S. Veitch*[1]*, G. Kaip*[1]*, R. Smith*[2] [1]*The University of Texas at El Paso* [2]*University of Utah*
11:20 – 11:40	Seismic Depth Imaging Workflow For Imaging The Vicinity Of The COSC-1 Borehole, Central Sweden ***H. Simon***[1]*, S. Buske*[1]*, P. Hedin*[2]*, C. Juhlin*[3]*, F. Krauß*[4]*, R. Giese*[4] [1]*TU Bergakademie Freiberg* [2]*Geological Survey of Sweden* [3]*Uppsala University* [4]*GFZ German Research Centre for Geosciences*
11:40 – 12:00	Can We Use Sparse 3D Seismics In Mineral Exploration? Takeaways From COGITO-MIN Project *B. Singh*[1]*,* ***M. Malinowski***[1]*, F. Hloušek*[2]*, E. Koivisto*[3]*, S. Heinonen*[4]*, O. Hellwig*[2]*, S. Buske*[2]*, M. Chamarczuk*[1]*, S. Juurela*[5] [1]*Polish Academy of Sciences* [2]*TU Bergakademie Freiberg,* [3]*University of Helsinki* [4]*Geological Survey of Finland* [5]*Boliden FinnEx*

12:00 – 13:20	**Lunch at Esplanade Atrium Garden Restaurant**
13:20 – 13:40	Full wave seismic modeling for Deep Seismic Profiling ***A. Kostyukevych**, V. Merschij, V. Tulchinsky* *Tesseral Technologies Inc*
COMPREHENSIVE GEOLOGICAL INTERPRETATION	
13:40 – 14:00	Geophysical Characterisation Of Crustal Scale Mineral Systems: A Passive Seismic Experiment Across World-Class Orogenic Gold Deposits, Kalgoorlie Area, Western Australia *R. Tian[1,2], M. Dentith[2], **R. Murdie**[3], H. Yuan[2,3,4], K. Gessner[3]* *[1]Chengdu University of Technology [2]University of Western Australia [3]Geological Survey of Western Australia [4]Macquarie University*
14:00 – 14:20	Imaging The Cratonistion Of Western Australia Using Passive Seismic Methods ***R. Murdie**[1], H. Yuan[1,2,3], S. Johnson[1], K. Gessner[1], M. Dentith[2], X. Xu[4]* *[1]Geological Survey of Western Australia [2]University of Western Australia [3]Macquarie University [4]Chinese Academy of Sciences*
14:20 – 14:40	AusLAMP – Imaging The Australian Lithosphere For Resource Potential (WebEx) ***J. Duan**, D. Kyi, W. Jiang, A. Kirkby* *Geoscience Australia*
14:40 – 15:00	A Unique Wide-Angle Reflection/Refraction Survey Across The Central Fennoscandian Shield, Sweden ***S. Buntin**[1], A. Malehmir[1], M. Malinowski[2], H. Thybo[3], D. Wójcik[2], T. Janik[2], I. Artemieva[4], K. Högdahl[1], and S. Buske[5]* *[1]Uppsala University [2]Polish Academy of Sciences [3]Istanbul Technical University [4]Stanford University [5]Technical University Bergakademie Freiberg*
15:00 – 15:30	**Afternoon Tea**
15:30 – 15:50	Continent-Ocean Transition Or Boundary? Crowd-Sourced Seismic Interpretations Of The East-India Margin (WebEx) ***J. Alcalde**[1], C. E. Bond[2], R. Carbonell[3], R. W.H. Butler[2]* *[1]Institute of Earth Sciences Jaume Almera [2]University of Aberdeen [3]ION Geophysical Corporation*
15:50 – 16:10	Subcrustal Reflectivity Beneath Central And South-West Iberia (WebEx) *I. Palomeras[1], P. Ayarza[1], J. Díaz[2], J. Andrés[2], A. Alvarez-Valero[1], J. Gomez-Barreiro[1], **R. Carbonell**[2].* *[1]University of Salamanca [2]Institute of Earth Science Jaume Almera*
16:10 – 16:30	Revised Seismic Stratigraphy For The Mentelle Basin Based On The Results Of IODP Expedition 369 (WebEx) *O. J. Oye, **R. W. Hobbs*** *Durham University*
16:30 – 16:50	Multitechnique Regional Seismic Imaging – A Case Study From The Tokai Area, Japan (presented by M. Malinowski) ***A. Gorszczyk**[1,2], S. Operto[3], S. Sambolian[3]* *[1]University Grenoble Alpes [2] Polish Academy of Sciences [3]University Nice Sophia-Antipolis*
16:50 – 17:30	**Discussion and closing remarks Chair:** *M. Urosevic, R. Durrheim*
18.30	**Gala Dinner in Orion Room**

THURSDAY 19 MARCH	
Time	
7:00	**Arrive at B-Shed Fremantle for 7:30am departure to Rottnest Island**
13:30	**Arrive at Rottnest Island jetty for 14:00pm departure to B-Shed Fremantle**
15:30 – 17:00	**Poster Session and Afternoon Tea at Esplanade Hotel**
ET RESOURCE POTENTIAL	
17:00 – 17:25	**Keynote address – Eleanor Sansom, Curtin University** (WebEx) Insight At Mars – Seismicity And Meteorite Strikes ***E. K. Sansom et.al*** *Curtin University*
MOHO IN 3D	
17:25 – 17:45	Seismic full waveform inversion of wide-aperture Moho reflection (PmP) using a trans-dimensional Bayesian method (WebEx) ***P. Guo***[1]*, S. Singh*[2]*, V. Vaddineni*[2]*, G. Visser*[1]*, E. Saygin*[1] [1]*CSIRO* [2]*Institut de Physique du Globe de Paris, France*
17:45 – 18:30	**Discussion and selection of SEISMIX 2022 venue** *M. Urosevic, C. Juhlin, L. Brown*
18:30	**Beverages and canapes**

POSTER PRESENTATIONS

Spectral Decomposition For Seismic Imaging *Sunjay Sunjay*
Vintage crustal-scale seismic profiling data made available for future applications: DEKORP 1984 – 1999 *Lauretta Kaerger*
Imaging the roots of geothermal systems using seismic attenuation, ambient noise and body-wave inversion, and conductivity, Taupo Volcanic Zone, New Zealand *Stephen Bannister*
Ocean Bottom Seismic Survey in the Knipovich Ridge area *Wojciech Czuba*

TTZ-South seismic profile reveals the lithospheric structure along the SW border of the East European Craton in SE Poland and NW Ukraine *Tomasz Janik*
Assessing the coherence of fiber-optic strain data *Manfred Stiller*
Coherent diffraction imaging of faults and fractures *Manfred Stiller*
Multi-disciplinary data contribution to EPOS e-infrastructure *Ramon Carbonell*
Seismic imaging technologies for mineral exploration. The SIT4ME project *Juan Alcalde*
The Transition From An Intraoceanic Submarine Acretionary Prism To The Onland Fold-And-Thrust Belt In The Taiwan Arc-Continent Collision *Juan Alcalde*
Signal-theoretical study of wireline DAS-VSP coupling noise *Evgeniia Martuganova*
Mitigating the nonlinearity of crustal-scale full waveform inversion through the graph space optimal transport misfit function *Andrzej Górszczyk*
GO_3D_OBServer - Offshore Benchmark of Subduction Environment in Realistic Visco-Elastic Representation *Andrzej Górszczyk*
Geophysical Characterization of BSUIN Underground Laboratories: Geophysics at the Research and Education Mine Reiche Zeche in Freiberg, Germany *Vera Lay*
Plate bending and drops in P-wave speeds for the crust and upper mantle of the Hikurangi Oceanic Plateau as it subducts beneath southeastern North Island, New Zealand *Tim Stern*
A probabilistic crustal shear-wave velocity model of the east Albany-Fraser Orogen, West Australian Craton *Tingzi Li*

Unsupervised learning used in automatic detection and classification of ambient-noise recordings from a large-N array *Michał Chamarczuk*
Towards an integrated depth imaging workflow for hardrock seismic data employing full-waveform inversion: case study from the Kylylahti massive sulfide deposit, Finland *Michal Malinowski*
Imaging the Hikurangi subduction megathrust using ambient noise and passive-source body waves, Raukumara, New Zealand *Stephen Bannister*
Ligurian Basin: Transition from continental to oceanic crust *Martin Thorwart*
Crustal structure underneath the Browse Basin (North-West Australia): a new look from vintage refraction and wide-angle seismic data *Martin Thorwart*
High-resolution seismic profiling of quaternary sediments affected by the plate-bounding alpine fault, Whataroa Valley, New Zealand *Andrew Gorman*
Post-Critical, Pre-Critical, And Critical Seismic Reflections Using Virtual Sources, Part Ii: Further Examples Of Applications *Wang-Ping Chen*
Nodal Acquisition Seismic Experiment in the highlands of Victoria/NSW, Australia, and challenges in processing of the data *Ross Costelloe*
Deep structure of North-East Eurasian margin on geotransect “Arctic Ocean – Pacific Ocean” *Ilia Vinokurov*
Constraints on Archean tectonic processes from deep seismic reflection surveys in the Yilgarn, Pilbara, and Superior cratons *Andrew J. Calvert*
Development of seismic S-wave sources for near-surface applications at the Leibniz Institute for Applied Geophysics (LIAG) *Sonja Halina Wadas*
Improved seismic imaging of Quaternary overdeepened valleys in the European Alps *Sonja Halina Wadas*