





**AUSTRALIAN SOCIETY OF EXPLORATION GEOPHYSICISTS**  
**1<sup>ST</sup> ASEG DISCOVER SYMPOSIUM**  
 15-18 OCTOBER • Wrest Point Hotel, Hobart, Tasmania

**PRELIMINARY PROGRAM**


**Tuesday 15 October 2024**

10am-12:30pm	Sponsors & Exhibitors bump in				
12 noon	Registration Desk open				
1pm –1:30pm	<i>Trade Exhibition Open</i> <span style="float: right;"><i>Exhibition Foyer</i></span>				
<b>Time</b>	<b>Plenary Hall Workshop</b>	<b>Tasman Room A Workshop</b>	<b>Tasman Room B&amp;C Workshop</b>	<b>Wellington Room Workshop</b>	<b>Boardwalk Gallery Workshop</b>
1:30pm –3pm	<b>Workshop 1</b> <b>Electrical Geophysics Case Studies and New Developments</b>  <i>Daniel Eremenco, Gap Geophysics Australia; Mr Ronny Stolz, Jonathan Rudd, Dias Geophysical and Dias Airborne; Christopher Parker, IPHT</i>	<b>Workshop 2</b> <b>Passive Seismic – a tool for early stage exploration</b>  <i>Dr Richard Lynch, Dr Anaïs Lavoué, Sisprobe</i>	<b>Workshop 3</b> <b>Forward Stratigraphic Modelling and Geophysical Inverse Models</b>  <i>Cedric Griffiths, StrataMod Pty Ltd.</i>	<b>Workshop 4</b> <b>DAS, Machine Learning, Interferometry &amp; Beyond: A Tour of Modern Geophysical Buzzwords</b>  <i>Tjaart de Wit, Institute of Mine Seismology</i>	<b>Workshop 5</b> <b>Towed time domain electromagnetic and direct current electrical resistivity surveying</b>  <i>Dr David Allen, Groundwater Imaging Pty Ltd</i>
3pm –3:30pm	<i>Afternoon Refreshments and Trade Exhibition</i> <span style="float: right;"><i>Exhibition Foyer</i></span>				
3:30pm – 5pm	Workshop 1: continuation	Workshop 2: continuation	Workshop 3: continuation	Workshop 4: continuation	Workshop 5: continuation
5pm-7pm	Welcome Event, Wrest Point Exhibition Foyer				<i>With thanks to our Sponsor</i>  <b>institute of mine seismology</b>

## Wednesday 16 October 2024

Time	Plenary Hall	Tasman Room A	Tasman Room B&C	Wellington Room	Boardwalk Gallery
8am – 8:30am	<i>Registration and Trade Exhibition Open + Arrival Tea and Coffee</i>				<i>Exhibition Foyer</i>
8:30am – 10am	<b>Workshop 6</b> <b>SIMPEG open source modelling and inversion with Geoscience ANALYST Pro Geophysics - Session 1</b>  <i>Dr James Reid, Glenn Pears, Mira Geoscience</i>	<b>Workshop 7</b> <b>QGIS for Exploration Geophysics</b>  <i>Thomas Schaap, Mark Grujic, Dr Thomas Ostersen, Datarock</i>	<b>Workshop 8</b> <b>Using CoFI to experiment with geophysical inversions</b>  <i>Professor Malcolm Sambridge, Research School of Earth Sciences, The Australian National University</i>	<b>Workshop 9</b> <b>Geological interpretation of aeromagnetic data</b>  <i>Dr Teagan Blaikie, Yvonne Wallace, Sharon Lowe, Southern Geoscience Consultants</i>	<b>Workshop 10</b> <b>NMR: The missing link in hydrogeology that connects other data sets to water in the ground</b>  <i>Mike Hatch, Vista Clara Inc and CSIRO</i>
10am – 10:30am	<i>Morning Refreshments and Trade Exhibition</i>				<i>Exhibition Foyer</i>
10:30am-12pm	Workshop 6: continuation	Workshop 7: continuation	Workshop 8: continuation	Workshop 9: continuation	Workshop 10: continuation
12pm – 1pm	<i>Lunch and Trade Exhibition</i>				<i>Exhibition Foyer</i>
1:00pm – 2:30pm	<b>Workshop 11</b> <b>SIMPEG open source modelling and inversion with Geoscience ANALYST Pro Geophysics - Session 2</b>  <i>Dr James Reid, Glenn Pears, Mira Geoscience</i>	<b>Workshop 12</b> <b>Teaching Geophysics through Interactive Notebooks and Team-Based Learning</b>  <i>Prof Stuart Clark, Dr. Patrick Makuluni, UNSW Sydney</i>	<b>Workshop 13</b> <b>D.I.Y. Multiphysics Interpretation</b>  <i>Jarrod Dunne, Tom McNamara, James Parsons, QIntegral Pty Ltd</i>	<b>Workshop 14</b> <b>Adding value to governmental AEM data. The East Isa VTEM case study</b>  <i>Dr Andrea Viezzoli, Emergo, Italy</i>	<b>Workshop 15</b> <b>Natural Hydrogen Workshop</b>  <i>Hugo Beldame, Hamish Gordon, Mick Small, Natural Hydrogen Association of Australia</i>
2:30pm – 3pm	<i>Afternoon Refreshments and Trade Exhibition</i>				<i>Exhibition Foyer</i>
3pm – 4:30pm	Workshop 11: continuation	Workshop 12: continuation	Workshop 13: continuation	Workshop 14: continuation	Workshop 15: continuation
6pm – 8pm	<b>Early Career Networking Event</b> – (ticketed event)  Royal Yacht Club of Tasmania				With thanks to our Sponsor 

## Thursday 17 October 2024

Time	Plenary Hall				
7am – 7:50am	<i>Registration and Trade Exhibition Open + Arrival Tea and Coffee</i>				<i>Exhibition Foyer</i>
7:50am-7:55am	<b>Opening Address</b> Janelle Kerr, ASEG President				Plenary Hall
7:55am –8:10am	<b>Welcome to Country</b>				
8:10am –8:15am	<b>Dignitary Address</b> – The Hon Madeleine King MP (Pre-recorded)				
8:15am –8:25am	<b>Welcome from our Platinum Sponsor</b> - Asmita Mahanta, Global Practice Lead Geophysics				
8:25am –8:30am	<b>Welcome Remarks and Introduction to the Symposium Program</b> Eric Battig, ASEG DISCOVER Chairperson				
8:30am –9:00am	<b>Keynote Presentation</b> <b>Evolution of 3D electromagnetic inversions and their transition to an open-source ecosystem</b> <i>Lindsey Heagy, University of British Columbia</i>				
Time	Plenary Hall Concurrent Session 1.1	Tasman Room A Concurrent Session 1.2	Tasman Room B&C Concurrent Session 1.3	Wellington Room Concurrent Session 1.4	Boardwalk Gallery Concurrent Session 1.5
9:00am –9:20am	<b>1.1.1</b> <b>Simultaneous three-dimensional inversion of large-scale AEM data for changeability and conductivity using the GEMTIP model and moving sensitivity domain</b>  <i>Leif Cox, TechnoImaging</i>	<b>1.2.1</b> <b>Measuring Variations in the Seismic Velocity as a Diagnostic of Rock Damage and Healing</b>  <i>R Snieder, Colorado School of Mines</i>	<b>1.3.1</b> <b>TEMConfigurator, a new transient electromagnetic forward modelling interface, and evaluation of AgTEM-Wallaby and AgTEM-Wallaroo towed Transient Electromagnetic Systems capabilities and limitations.</b>  <i>David Allen, Groundwater Imaging</i>	<b>1.4.1</b> <b>Geophysical response of alteration and mineralisation in the Wafi-Golpu porphyry system, Papua New Guinea</b>  <i>Terry Hoschke, Alterrex</i>	<b>1.5.1</b> <b>Geological hypothesis testing via inference-mode multiphysics inversion</b>  <i>Gerrit Olivier, Fleet Space Technologies</i>

Time	Plenary Hall Concurrent Session 1.1	Tasman Room A Concurrent Session 1.2	Tasman Room B&C Concurrent Session 1.3	Wellington Room Concurrent Session 1.4	Boardwalk Gallery Concurrent Session 1.5
9:20am –9:40am	<b>1.1.2</b> <b>Equivalent circuits for inductive EM and galvanic IP to predict IP sensitivity</b> <i>James Macnae, CD3D</i>	<b>1.2.2</b> <b>Tackling rugose seabed, strike-shooting, short offset NAZ data in the Otway Basin with advanced processing technologies</b> <i>Robert To, Viridien</i>	<b>1.3.2</b> <b>Towards Efficient Bayesian MASW Analysis using JAX</b> <i>Jordan Dennis, Velseis</i>	<b>1.4.2</b> <b>Geophysical Signatures of a +5.4Moz gold deposit, NE Bankan, Guinea, West Africa</b> <i>Thomas Harris, Merlin Geophysics</i>	<b>1.5.2</b> <b>P-wave Travel-Time Tomography for Mineral Exploration</b> <i>Tjaart de Wit, Institute of Mine Seismology</i>
9:40am –9:50am	<b>1.1.3</b> <b>Closing the gap between galvanic and inductive methods: EEMverter, a new inversion tool for Electric and Electromagnetic data with focus on Induced Polarization</b> <i>Gianluca Fiandaca, University of Milano</i>	<b>1.2.3</b> <b>Accelerating PINN Convergence for Signal Reconstructions</b> <i>Amarjeet Kumar, Shearwater Geoservices</i>	<b>1.3.3</b> <b>Seasonal Temperature effect compensation in ERT monitoring without thermal measurements</b> <i>Alessandro Signora, University of Milan</i>	<b>1.4.3</b> <b>A Multi-Physics IP Approach to Encuentro Porphyry Deposit</b> <i>Héctor Verdejo, GRS LTDA Chile</i>	<b>1.5.3</b> <b>Applications of Advanced Full Physics Based Passive Seismic HVSR Imaging: Insights and Case Studies</b> <i>Mehdi Tork Qashqai, CSIRO</i>
9:50am – 10am					<b>1.5.4</b> <b>The effect of 1-bit normalization on ANT data, 3D velocity models, and their geological interpretation</b> <i>Patime Osman, Fleet Space Technologies</i>
10am – 10:30am	<i>Morning Refreshments and Trade Exhibition</i>				<i>Exhibition Foyer</i>
<b>Time</b>	<b>Plenary Hall</b>				
10:30am – 11am	<b>Keynote Presentation</b> <b>Hardrock 3D Seismic for BHP's Copper South Australia</b> <i>Jared Townsend, Think &amp; Act Differently, Powered by BHP</i>				<i>Plenary Hall</i>

Time	Plenary Hall Concurrent Session 2.1	Tasman Room A Concurrent Session 2.2	Tasman Room B&C Concurrent Session 2.3	Wellington Room Concurrent Session 2.4	Boardwalk Gallery Concurrent Session 2.5
11am – 11:20am	<b>2.1.1</b> <b>Redefining copper exploration at Oak Dam IOCG deposit through high-end hardrock seismic processing</b> <i>Robert To, Viridien</i>	<b>2.2.1</b> <b>Joint Inversion of Electrical and Electromagnetic data including IP: a methodological breakthrough</b> <i>Alessandro Signora, University of Milan</i>	<b>2.3.1</b> <b>Reaching the Pantheon: A Multidisciplinary Approach to Data Reprocessing and Depth Imaging in the Vulcan Sub-basin</b> <i>Alexey Artemov, Shearwater Geoservices</i>	<b>2.4.1</b> <b>Low-Frequency UAV SAM trials at Forrestania Electromagnetics Test Range in Western Australia</b> <i>Daniel Eremenco, Gap Geophysics Australia</i>	<b>2.5.1</b> <b>WA Array and MT – Phase 1 and 2 updates</b> <i>Ruth Murdie, DEMIRS</i>
11:20am - 11:30am	<b>2.1.2</b> <b>Cosmic-ray Muon Tomography: Applications at Olympic Dam</b> <i>Nigel Phillips, Ideon Technologies</i>	<b>2.2.2</b> <b>Three-dimensional AEM inversion considering IP effect using Octree mesh</b> <i>Gianluca Fiandaca, University of Milan</i>	<b>2.3.2</b> <b>Effectiveness of Reprocessed Legacy 2D Seismic for Regional Evaluation: Examples from the Southern Browse Basin</b> <i>Satoshi Ishikawa, Inpex</i>	<b>2.4.2</b> <b>Three examples of modern exploration for nickel in the Kimberley Region</b> <i>Tom Harding, IGO</i>	<b>2.5.2</b> <b>Real-Time Ambient Noise Tomography For Uranium Exploration : Case Study From Roughrider Project In Athabasca Basin, Canada</b> <i>Laleh Khadangi, Fleet Space Technologies</i>
11:30am – 11:40am					<b>2.5.3</b> <b>Scale Reduction in Porphyry Cu-Au Exploration using Ambient Noise Tomography</b> <i>Nick Smith, Fleet Space Technologies</i>
11:40am – 12pm	<b>2.1.3</b> <b>Integration by design: quantitative mineral system characterisation, and a new framework for evaluation of exploration “near-misses”</b> <i>James Austin, CSIRO</i>	<b>2.2.3</b> <b>Airborne IP driven exploration for a green-field research project</b> <i>Gianluca Fiandaca, University of Milano</i>	<b>2.3.3</b> <b>Velocity model building of VSP data through Semblance analysis</b> <i>Javad Khoshnavaz, EPIROC KLS</i>		<b>2.5.4</b> <b>21 Basalt Street: Undercover mineral exploration of the Mount Read Volcanics in north-western Tasmania</b> <i>George Taylor, Institute of Mine Seismology</i>

Time	Plenary Hall Concurrent Session 2.1	Tasman Room A Concurrent Session 2.2	Tasman Room B&C Concurrent Session 2.3	Wellington Room Concurrent Session 2.4	Boardwalk Gallery Concurrent Session 2.5
12pm – 12:20am	<b>2.1.4</b> <b>Utilizing DAS VSP for orebody imaging at Oak Dam IOCG</b> <i>Min Lee Chua, Viridien</i>	<b>2.2.4</b> <b>Modelling IP in Tempest data: the first preliminary steps and insights</b> <i>Andrea Viezzoli, Emergo</i>	<b>2.3.4</b> <b>Stratya2D: Kinematic Backstripping and Decompaction Enhanced by Image-Based 2D Horizon Integration</b> <i>Harikrishnan Nalinakumar, UNSW</i>	<b>2.4.4</b> <b>Outcomes from characterisation of the Moornambool Metamorphic Complex megaclasts in the Stawell Corridor with potential field modelling and neural network predictive targeting</b> <i>Tom McNamara, University of Melbourne</i>	<b>2.5.5</b> <b>A Novel yet Simple Approach to the Interpretation of HVSR Data in Australia – A Data Rich Case Study from the Pilbara</b> <i>Nathan Tabain, BHP</i>
12:20pm – 12:30pm	<b>2.1.5</b> <b>Multi-physics imaging of an iron-oxide copper gold (IOCG) deposit under thick cover</b> <i>Ben Kay, University of Adelaide</i>	<b>2.2.5</b> <b>Correcting EM responses at Girilambone for IP effects</b> <i>Kate Hine, Mitre Geophysics</i>	<b>2.3.5</b> <b>Seismic velocity analysis – recent experiences using a new approach to QC based on integrated geophysical modelling</b> <i>Jarrod Dunne, QIntegral</i>	<b>2.4.5</b> <b>Geophysical Exploration of Graphite in the Eyre Peninsula</b> <i>Claire Mortimore, Terra Resources</i>	<b>2.5.6</b> <b>Passive seismic imaging of Mt Isa Province</b> <i>Ao Chang, QUT/GSQ</i>
12:30pm – 12:40pm	<b>2.1.6</b> <b>Australia-wide 3D Density and Magnetic Susceptibility Models: Reducing the search space for IOCG deposits</b> <i>James Goodwin, Geoscience Australia</i>	<b>2.2.6</b> <b>Interpreting airborne electromagnetic data unburdened from induced polarisation effects: an unconventional mineral discovery case study from the eastern Yilgarn region of Western Australia</b> <i>Regis Neroni, NewGen Geo</i>	<b>2.3.6</b> <b>Uplift and subsidence history of the Barents Sea Basin: analysis of dynamic topography contribution</b> <i>Elena Babina, UNSW</i>		<b>2.5.7</b> <b>Detection of aircraft noise with buried distributed acoustic sensors</b> <i>Boris Gurevich, Curtin University</i>
12:40pm – 1:40pm	Lunch and Trade Exhibition				Exhibition Foyer

Time	Plenary Hall				
1:40pm – 2:10pm	<b>Keynote Presentation</b> <b>Integrating geophysical data with mineral systems models from the lithospheric to prospect scale</b> <i>Dr Kate Selway, Vox Geophysics</i>				
Time	Plenary Hall Concurrent Session 3.1	Tasman Room A Concurrent Session 3.2	Tasman Room B&C Concurrent Session 3.3	Wellington Room Concurrent Session 3.4	Boardwalk Gallery Concurrent Session 3.5
2:10pm – 2:30pm	<b>3.1.1</b> <b>Three-dimensional MobileMT and TMI Data Inversions for Mineral Exploration</b> <i>Leif Cox, Technolmaging</i>	<b>3.2.1</b> <b>How deep is the basement beneath the Otway Basin? Insight from semi-automated magnetic depth estimates</b> <i>Yvette Poudjom Djomani, Geoscience Australia</i>	<b>3.3.1</b> <b>Application of pseudo-3D reflection seismic arrays to map mafic-ultramafic intrusions at the Silver Knight Prospect in the Albany Fraser Orogen, Western Australia</b> <i>Antonio Huizi, IGO</i>	<b>3.4.1</b> <b>Heterodyne method for sulphide mapping. Latest field data</b> <i>Steve Collins</i>	<b>3.5.1</b> <b>Preliminary assessment of an alluvial aquifer system using airborne and ground-based geophysics: Upper Darling River Floodplain, New South Wales</b> <i>Andrew McPherson, Geoscience Australia</i>
2:30pm – 2:40pm	<b>3.1.2</b> <b>Interpretation of electromagnetic multifrequency natural field data from Red Setter prospect (Paterson area, Western Australia)</b> <i>Alexander Prikhodko, Expert Geophysics</i>	<b>3.2.2</b> <b>A Review of Physics-Based Machine Learning Approaches for Geological Modelling</b> <i>Vladislav Alekseev, UNSW</i>	<b>3.3.2</b> <b>Offering new geological insights to the Mawson Ni-Cu-Co prospect via seismic data reprocessing</b> <i>Alan Meulenbroek, Velseis</i>	<b>3.4.2</b> <b>Application of 3D Cole-Cole inversion by Offset Pole-Dipole Time-Domain IP data for mineral exploration in South Australia</b> <i>Takafumi Murakita, Jogmec</i>	<b>3.5.2</b> <b>Results from three large-area ground TEM surveys over highly salinised floodplains on the River Murray, South Australia</b> <i>Michael Hatch, University of Adelaide</i>
2:40pm – 2:50pm		<b>3.2.3</b> <b>Enhancing Salt Dome Recovery through Deep Learning Based Gravity Inversion</b> <i>Aseem Bin Sulaiman, UNSW</i>			

Time	Plenary Hall Concurrent Session 3.1	Tasman Room A Concurrent Session 3.2	Tasman Room B&C Concurrent Session 3.3	Wellington Room Concurrent Session 3.4	Boardwalk Gallery Concurrent Session 3.5
2:50pm – 3pm	<b>3.1.3</b> <b>New insights into the electrical structure of the Mount Isa Province from the Carpentaria Conductivity Anomaly Magnetotelluric Survey</b> <i>Dominic Brown, Geological Survey of Queensland</i>	<b>3.2.4</b> <b>A field trial of cross-well seismic with DAS and a high-frequency source: A field trial of cross-well seismic with DAS and a high-frequency source</b> <i>Nikita Beloborodov, Curtin University</i>	<b>3.3.3</b> <b>Marrying depth to top of basement mapping from magnetic field data with depth to base of cover mapping from gravity data: an example from the Mulgathing Trough of South Australia</b> <i>Clive Foss, CSIRO</i>	<b>3.4.3</b> <b>The impact of geometry on Resistivity/IP surveys</b> <i>Emilio Rodriguez Nieves, ExploreGeo</i>	<b>3.5.3</b> <b>Three-Dimensional Mapping of Palaeovalleys in the West Musgrave Region, Central Australia</b> <i>Joshua Lester, Geoscience Australia</i>
3:00pm – 3:10pm	<b>3.1.4</b> <b>Innovations in airborne natural field electromagnetics for deep exploration</b> <i>Alexander Prikhodko, Expert Geophysics Limited</i>	<b>3.2.5</b> <b>Monitoring underwater sounds using distributed acoustic sensing: a pilot study from Australia’s North West Shelf</b> <i>Boris Gurevich, Curtin University</i>			
3:10pm – 3:40 pm	<i>Afternoon Refreshments and Trade Exhibition</i>				<i>Exhibition Foyer</i>
Time	Plenary Hall				
3:40pm – 4:10pm	<b>Keynote Presentation</b> <b>Using Deep Learning to find impact structures in continental-scale datasets</b> <b>Mark Grujic, Datarock</b>				<i>Plenary Hall</i>



Time	Plenary Hall Concurrent Session 4.1	Tasman Room A Concurrent Session 4.2	Tasman Room B&C Concurrent Session 4.3	Wellington Room Concurrent Session 4.4	Boardwalk Gallery Concurrent Session 4.5
4:10pm – 4:20pm	<b>4.1.1 Ambient Noise Tomography (ANT) as a scalable data platform for Machine-Learning driven mineral discovery</b> <i>Jack Muir, Fleet Space Technologies</i>	<b>4.2.1 Joint inversion of gravity and MT for mineral systems mapping</b> <i>Stephan Thiel, CSIRO</i>	<b>4.3.1 Geophysical Assessment of Mine Tailings for New- Economy Minerals</b> <i>Ben Patterson, GHD Pty Ltd</i>	<b>4.4.1 Modernising Australian geophysics datasets to enable National-scale multiphysics computation at Exascale: one size can no longer fit all</b> <i>Lesley Wyborn, Australian National University</i>	<b>4.5.1 Subsurface Velocity Structure of the Tasmanian Midlands using Ambient Noise Tomography: Implications for Geothermal Potential</b> <i>Tjaart De Wit, Institute of Mine Seismology</i>
4:20pm – 4:30pm			<b>4.3.2 MAPRad – A miniaturised magnetic antenna Ground Penetrating Radar</b> <i>Matthew Auld, RMIT University</i>		
4:30pm – 4:50pm	<b>4.1.2 Computer vision tools for geophysicists</b> <i>Thomas Schaap, Datarock</i>	<b>4.2.2 3D joint inversion of ground and airborne EM</b> <i>Carsten Scholl, Viridien</i>		<b>4.4.2 AusLAMP – mapping lithospheric architecture and mineral potential in central and eastern Australia</b> <i>Jingming Duan, Geoscience Australia</i>	<b>4.5.2 Geothermal exploration using SQUID TEM survey and 3D inversion, Southern Sumatra, Indonesia</b> <i>Leif Cox, TechnoImaging</i>
4:50pm – 5pm	<b>4.1.3 Leveraging Machine Learning and Geophysical Data for Automated Detection of Interior Structures of Cratons</b> <i>Hojat Shirmard, The University of Sydney</i>	<b>4.2.3 A decade-long between-system comparison of AEM conductivities at Menindee Lake using deterministic and stochastic inversion</b> <i>Anandaroop Ray, Geoscience Australia</i>	<b>4.3.3 WA Array Site Characterisation – Enhanced Shear Wave Velocity Profiling from Passive Seismic Data</b> <i>Reza Ebrahimi, Geological Survey of Western</i>	<b>4.4.3 (accepted as short – 10min) Tomographic model of the Australian region from seismic full waveform inversion</b> <i>Josef Holzschuh, Geoscience Australia</i>	<b>4.5.3 Lemont, a blind geothermal power plus lithium project</b> <i>John Bishop, Mitre Geophysics</i>

Time	Plenary Hall Concurrent Session 4.1	Tasman Room A Concurrent Session 4.2	Tasman Room B&C Concurrent Session 4.3	Wellington Room Concurrent Session 4.4	Boardwalk Gallery Concurrent Session 4.5
5pm – 5:10pm	<b>4.1.4</b> <b>Integration of Advanced Machine Learning Techniques in Mineral Exploration: Prospectivity Mapping of Porphyry Mineralisation in New South Wales, Australia</b> <i>Elnaz Heidari, The University Of Sydney</i>			<b>4.4.4</b> <b>Electrical structure of the Newer Volcanics Province, SE Australia, from 3-D Magnetotelluric Imaging</b> <i>Xinpeng Ma, Jilin University</i>	<b>4.5.4</b> <b>Is there a hotspot under NE Tasmania?</b> <i>Dave Bennett, Devil Resources</i>
5:10pm	Day 1 Close				
5:10pm – 6:40pm	Free Time				
6:40pm	<b>Meet at the Wrest Point Exhibition Hall for Ferry transport to the Dinner Venue (Exclusive for delegates attending the dinner)</b> <b>Ferry departs at 7:00pm sharp</b>				
7:20pm – 10:20pm	<b>Symposium Dinner (ticketed event)</b> <b>Waterline Berthing Deck</b>				

## Friday 18 October 2024

Time	Plenary Hall					
8am – 8:30am	Registration and Trade Exhibition Open + Arrival Tea and Coffee					Exhibition Foyer
8:30am – 8:35am	<b>Welcome Day 2</b> <b>Eric Batting, ASEG DISCOVER Chairperson</b>					Plenary Hall
8:35am – 9:05am	<b>Keynote Presentation</b> <b>The Value of Geological Analogues for Unlocking the Subsurface for the Energy Transition</b> <i>Simon Lang, The University of Western Australia</i>					
Time	Plenary Hall Concurrent Session 5.1	Tasman Room A Concurrent Session 5.2	Tasman Room B&C Concurrent Session 5.3	Wellington Room Concurrent Session 5.4	Boardwalk Gallery Concurrent Session 5.5	
9:05am – 9:15am	<b>5.1.1</b> <b>Real-Time Multiphysics Sensors Derived from Space Exploration Technology for Scalable Mineral Exploration</b>  <i>Gerrit Olivier, Fleet Space Technologies</i>	<b>5.2.1</b> <b>Drill core scale petrophysical zonation of Jupiter and Taurus, Mount Woods, SA</b>  <i>Andreas Bjork, Minex CRC - University of South Australia</i>	<b>5.3.1</b> <b>Seafloor geophysical mapping: Renewable energy use case and the importance of open access data</b>  <i>Christopher Yule, CSIRO</i>	<b>5.4.1</b> <b>Capturing high-resolution lithological heterogeneity in geological CO2 storage reservoir models using stochastic seismic inversion</b>  <i>Seyed Ahmad Mortazavi, University of Melbourne</i>	<b>5.5.1</b> <b>Large geophysical surveys over NSW released in 2024</b>  <i>Astrid Carlton, Geological Survey of NSW</i>	
9:15am – 9:25am					<b>5.5.2</b> <b>An investigation of wing-tip TMI gradiometry using data from the Yathong Survey near Cobar, NSW</b>  <i>Clive Foss, CSIRO</i>	

Time	Plenary Hall Concurrent Session 5.1	Tasman Room A Concurrent Session 5.2	Tasman Room B&C Concurrent Session 5.3	Wellington Room Concurrent Session 5.4	Boardwalk Gallery Concurrent Session 5.5
9:25am – 9:35am	<b>5.1.2</b> <b>A comparison of 3D active seismic and ambient noise models</b> <i>Timothy Jones, Fleet Space Technologies</i>	<b>5.2.2</b> <b>Remanence remembered – an exploration case history from western Tasmania</b> <i>Mark Duffett, Mineral Resources Tasmania</i>	<b>5.3.2</b> <b>The Plumes of Maralinga: Mapping nuclear fallout patterns over sixty years after atomic bomb testing</b> <i>James Cunneen, Eit Pty Ltd</i>	<b>5.4.2</b> <b>Time-lapse 3D reverse VSP monitoring of a 16.5-tonne CO2 injection into a shallow fault at the Otway site</b> <i>Roman Isaenkov, Curtin University</i>	<b>5.5.3</b> <b>Quantitative determination of airborne Mag/Rad survey quality</b> <i>Sam Matthews, Geological Survey Of NSW</i>
9:35am – 9:45am	<b>5.1.3</b> <b>3D numerical modelling of the mantle flow during subduction termination: in relation to seismic anisotropy beneath the Cyprus arc</b> <i>Peigen Luo, University of Chinese Academy of Sciences</i>	<b>5.2.3</b> <b>Geoscience at the Core Scale: A Comparison of Petrophysical Data, Geologic Classifications, and Assay Results for Two South American Porphyry Deposits Using Entry Level Statistics and Cluster Analysis</b> <i>Blake Cross, Condor Consulting, Inc</i>			
9:45am – 9:55am		<b>5.2.4</b> <b>GSWA petrophysics update: insights from physical property cross plots</b> <i>Sasha Banaszczyk, DEMIRS - GSWA</i>	<b>5.3.3</b> <b>Advancing Space Weather Hazard Research in Australia: a Journey of Discovery from AWAGS to AusLAMP</b> <i>Liejun Wang, Geoscience Australia</i>	<b>5.4.3</b> <b>Re-evaluating the Stratigraphy of the Polda Basin: Implications for Underground Hydrogen Storage in Onshore Salt Caverns</b> <i>Timothy Rady, Geomorph Energy Consulting Pty Ltd</i>	<b>5.5.4</b> <b>Georgetown AEM survey: Preliminary Results</b> <i>Sasha Aivazpourporgou, Geological Survey Of Queensland</i>
9:55am – 10:05am					<b>5.5.5</b> <b>Maximising the Value of Geophysical Data for Mineral Exploration: A Case Study from the Yilgarn Craton</b> <i>Mosayeb Khademi, Minex CRC/University of South Australia</i>

10:05am – 10:30am	<i>Morning Refreshments and Trade Exhibition</i>					<i>Exhibition Foyer</i>
<b>Time</b>	<b>Plenary Hall</b>					
10:30am – 11:00am	<b>Keynote Presentation</b> <b>From Skeletons to Pegmatites – Navigating the Hype of GPR</b> <i>Jan Francke, Groundradar Inc</i>					<i>Plenary Hall</i>
11am – 12pm	<b>ASEG Awards and Closing Ceremony</b>					
12pm – 1pm	<i>Lunch and Trade Exhibition</i>					<i>Exhibition Foyer</i>
<b>Time</b>	<b>Plenary Hall Workshop</b>	<b>Tasman Room A Workshop</b>	<b>Tasman Room B&amp;C Workshop</b>	<b>Wellington Room Workshop</b>	<b>Boardwalk Gallery Workshop</b>	
1:00pm – 4:00pm		<b>Workshop 16</b> <b>Airborne electromagnetic (AEM) surveying from farm to table -- an interactive overview of acquisition, processing and inversion of AEM data</b>  <i>Dr Anandaroop Ray, Dr Yusef Ley-Cooper, Geoscience Australia</i>	<b>Workshop 17</b> <b>Advances in Geothermal Energy Exploration and Development</b>  <i>Mick Small, AGA</i>	<b>Workshop 18</b> <b>MT for mineral exploration: Tips, traps and interpretation</b>  <i>Dr Kate Selway, Vox Geophysics and University of Tasmania</i>	<b>Workshop 19</b> <b>D.I.Y. Multiphysics Interpretation</b>  <i>Jarrod Dunne, Tom McNamara, James Parsons, QIntegral Pty Ltd</i>	
4pm – 5pm	<i>Farewell Refreshments</i>					<i>Exhibition Foyer</i>

*The ASEG DISCOVER 2024 reserves the right to amend or alter any advertised details relating to dates, program and speakers if necessary and without notice, as a result of circumstances beyond their control.*

*All attempts will be made to keep any changes to an absolute minimum.*

# THANK YOU TO OUR SPONSORS

## Destination Partner



**BUSINESS  
EVENTS  
TASMANIA**

## Our Sponsors and Exhibitors

**BHP**



shearwater



**Newmont**



VIRIDIEN

