



Mine Seismology Workshop



26 - 28 September 2023, Radisson Hotel, Sudbury, ON

The registration fee is CAD 150 / day (incl. tea / coffee & lunch) for in-person attendance. Presenters will receive a 100% discount for the day of the presentation. There is a 50% discount for students.

For more information and registration please visit [IMS web site](https://www.ims-seismology.org/).

Tuesday 26 September - Day 1

Presentations on mine seismology and ground control, theory & software training

08h00 - 10h00 | Morning Session I - Presentations

08h00 - 08h15 | Welcome, morning coffee and tea

08h15 - 09h10 | Rational rockburst hazard and support demand assessment - *Peter Kaiser (GeoK)*

09h10 - 09h40 | Assessing the Loading/Demand of Crush-type Seismic Sources on Ground Support - *Alex Rigby (IMS AU)*

09h40 - 10h10 | Analysis of Very Large Seismic Events in Mines - *Marty Hudyma (The Rock Doctor)*

10h10 - 10h40 | Morning Tea

10h40 - 12h10 | Morning Session II - Presentations

10h40 - 11h10 | Seismic Integrations at Eleonore Mine - *Hamza Lamghani / Denis Thibodeau (Newmont)*

11h10 - 11h40 | Classification of seismic signals and events - *Stephen Meyer (IMS CA)*

11h40 - 12h10 | Using ambient noise to monitor tailings dams - *Miro Doring (IMS CA)*

12h10 - 13h00 | Lunch

13h00 - 14h30 | Afternoon Session I - Rockburst Hazard Assessment Demo/Training

14h30 - 15h00 | Afternoon Tea

15h00 - 16h30 | Afternoon Session II - Rockburst Hazard Assessment Demo/Training

18h00 | Social function hosted by IMS

Wednesday 27 September - Day 2

Presentations on mine seismology and ground control, theory & software training

08h00 - 10h15 | Morning Session I - Presentations

08h00 - 08h15 | Morning coffee and tea

08h15 - 08h45 | A case study of mining induced seismicity in a weak rock mine at Barrick Goldstrike in Nevada - *Rocky Wu (Rocky Mining)*

08h45 - 09h15 | Delineation of Hazard-Based “Design Event” for Dynamic Support System Analysis - *Lindsay Moreau-Verlaan (RockEng)*

09h15 - 09h45 | Recognizing the complexity of seismic activity using back-analysis of failures, analysis of groups of seismic events and moment tensor decompositions - *Rebecca Hauta (Stornoway Diamonds)*

09h45 - 10h15 | Dynamic modelling of strainbursting around tunnels - *Alex Rigby (IMS AU)*

10h15 - 10h45 | Morning Tea

10h45 - 12h15 | Morning Session II - Presentations

10h45 - 11h15 | Examples of Seismic Response to Mining from Glencores’ Nickel Rim South Mine - *Brad Simser (Glencore)*

11h15 - 11h45 | Applications of DAS in underground mines - *Gareth Goldswain (IMS AU)*

11h45 - 12h15 | Travel time tomography in underground mines - *Miro Doring (IMS CA)*

12h15 - 13h00 | Lunch

13h00 - 13h30 | Rockburst Mitigation at Vale’s Deep Mining Operations in Sudbury – Case Studies - *Mike Yao (Vale)*

13h30 - 14h45 | Afternoon Session I - Theory & Software training (sources, waves, location)

14h45 - 15h15 | Afternoon Tea

15h15 - 16h45 | Afternoon Session II - Theory & Software training (source mechanisms, analysis and interpretation of seismicity)

Thursday 28 September - Day 3

Presentations on mine seismology and ground control, live demos

08h00 - 10h15 | Morning Session I - Presentations

08h00 - 08h15 | Morning coffee and tea

08h15 - 08h45 | Seismic system health - *Thomas Huelin (IMS CA)*

08h45 - 09h15 | Assessing the Relationship Between Mine Seismicity and Stress: Strain States via Machine Learning - *Evan Dressel (Queen's University)*

09h15 - 09h45 | Recent development in automatic processing of seismic monitoring data - *Daryl Rebuli (IMS CA)*

09h45 - 10h15 | Establishing Dynamic Support Standards and Guidelines for Mine-Scale Spatial Distribution of Support Implementation with a link to Seismic Data - *Lindsay Moreau-Verlaan (RockEng)*

10h15 - 10h45 | Morning Tea

10h45 - 12h00 | Morning Session II - Demo (Ticker & Nexus)

12h00 - 13h00 | Lunch

13h00 - 14h30 | Afternoon Session I - Demo (DAS)

14h30 - 15h00 | Afternoon Tea

15h00 - 16h30 | Afternoon Session II - Discussion & Closing