



COSMO – Stochastic Mine Planning Laboratory
Mining Engineering
McGill University

Travelling Technical Day – Hybrid Format

Hosted by: AngloGold Ashanti

Friday December 1st, 2023
09:00 – 16:00 (MST)

In person: 6363 S Fiddlers Green Cir, Suite 1000
Greenwood Village, Colorado 80111, USA

Virtual: Microsoft Teams Meeting

If you are attending virtually, please accept the invitation through your email.
If you are attending in person please RSVP to:

Liam Findlay
liam.findlay@mail.mcgill.ca

If you are attending in person and need information regarding hotel accommodations please do not hesitate to contact us.



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TRAVELLING TECHNICAL DAY PROGRAM

December 1st, 2023

Hosted by: AngloGold Ashanti, Denver, Colorado

9:15 – 9:30	<i>Roussos Dimitrakopoulos - Welcome and Update on New Developments</i>
9:30 – 10:00	Integrating Progressive Reclamation and Waste Management into the Simultaneous Stochastic Optimization Framework with Contextual Bandits <i>Zachary Levinson</i>
10:00 – 10:30	Optimizing Multi-Element Cut-Off Grades for a Strategic Production Plan Under Supply Uncertainty <i>Jake Cutler</i>
10:30 – 11:00	Simultaneous Stochastic Optimization of Short-Term Planning of Mining Complexes under Supply and Processing Uncertainty <i>João Pedro de Carvalho</i>
11:00 – 11:15	<i>Break</i>
11:15 – 11:45	Diverse Candidate Generation for a Sustainability-Aware Stochastic Optimization of Mining Complexes <i>Yassine Yaakoubi</i>
11:45 – 12:15	On the Commercial Software for the Optimization of Mining Complexes: Present Release, Applications and Next Developments <i>Matheus Faria and Benny Cohen</i>
12:15 – 13:15	<i>Lunch</i>
13:15 – 13:45	Joint Stochastic Optimization of Stope Layout, Production Scheduling, and Access Network, with Dilution Management <i>Cristina Penadillo Palomino</i>
13:45 – 14:15	Impacts of High-Order Geostatistical Simulations on the Integrated Long-term Underground Mine Production Scheduling <i>Laura Andrade</i>
14:15 – 14:30	<i>Break</i>
14:30 – 15:00	High-Order Stochastic Simulation via Semidefinite Programming (SDP): Algorithm, Implementation, and Case Study <i>Lingqing Yao</i>
15:00 – 15:30	Simultaneous Stochastic Optimization of Mining Complexes with Recovery and Market Uncertainty: Application at an Open Pit Copper Mining Complex <i>Will Yi Jiang</i>
15:30 – 16:00	Updating Geological and Geometallurgical Orebody Models with Incoming Production Data Using Actor-Critic Reinforcement Learning <i>Liam Findlay</i>
16:00	<i>Closing Remarks: Research in the Year Ahead</i>