COSMO – Stochastic Mine Planning Laboratory
Mining Engineering

Travelling Technical Day

Friday December 2nd, 2022
09:00 – 17:00 (EST)
Hybrid Format

In person:
RBC Foundation Glass Room, Royal Ontario Museum
100 Queen's Park, Toronto, ON, Canada, M5S 2C6

Virtual:
Microsoft Teams

If you plan to attend the technical day presentations, please RSVP to:

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PROGRAM

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9:00 – 9:15	*Roussos Dimitrakopoulos - Welcome and Update on New Developments*
9:15 – 9:45	Data-Driven Geometallurgical Prediction Models of Plant Performance Indicators for Mine Production Scheduling *Christian Both*
9:45 – 10:15	Jointly Optimizing the Short- and Long-term Production Schedule of a Mining Complex Under Uncertainty *Zachary Levinson*
10:15 – 10:45	Integrating Geometallurgy in the Simulation of Processing Plant Responses and Applying Policy Gradient for Shovel Allocation in Operating Mining Complexes *Joao Pedro de Carvalho*
10:45 – 11:00	*Break*
11:00 – 11:30	A Lane-based Cut-off Grade Optimization Method Under Supply Uncertainty for Underground Mining *Matheus Furtado e Faria*
11:30 – 12:00	KPI-COSMO Stochastic Optimizer is Coming Soon: The First Commercial Software Solution in the Market to Use Stochastic Optimization for the Long-Term Production Planning of Mining Complexes *Benny Cohen, CEO, KPI Digital*
12:00 – 13:00	*Lunch*
13:00 – 13:30	Rethinking Optimizers and Continual Learning: A Study on Combining AI and OR for Optimizing Industrial Mining Complexes under Uncertainty *Yassine Yaakoubi*
13:30 – 14:00	Stochastic Optimization for Long-Term Planning of a Mining Complex with In-Pit Crushing and Conveyance Systems *Liam Findlay*
14:00 – 14:30	Integrated Stochastic Optimization of Stope Design and Long-term Mine Production Scheduling: Method and Application at an Operating Underground Copper Mine *Laura Andrade*
14:30 – 14:45	*Break*
14:45 – 15:15	A Stable High-Order Sequential Simulation Method Based on Convex Optimization *Lingqing Yao*
15:15 – 15:45	Simultaneous Stochastic Optimization with Equipment Uncertainties: Application at an Open Pit Copper Mining Complex *Will Jiang*
15:45 – 16:15	Joint Stochastic Optimization of Open Pit Mine Production Scheduling with Ramp Design *Jake Cutler*
16:15	*Closing Remarks: Research in the Year Ahead*