



## ***COSMO – Stochastic Mine Planning Laboratory*** **Mining Engineering**

### **COSMO Travelling Technical Day Meeting**

**Hosted by BHP**

Event Location: Cerro El Plomo 6000  
Las Condes, Santiago, Chile 7560623

### **PROGRAM**

**Technical Day – Friday, November 30<sup>th</sup>, 2018**

<b>8:45 – 9:00</b>	<b><i>Safety Directions</i></b>
<b>9:00 – 9:15</b>	<b><i>Welcome</i></b>
9:15 – 9:45	Overview of New Research Developments and Outputs <i>Roussos Dimitrakopoulos</i>
9:45 – 10:15	Dynamic Simultaneous Optimization of the Escondida Mining Complex, Chile <i>Fernanda Del Castillo S.</i>
10:15 – 10:45	Simultaneous Stochastic Optimization: An Open Pit Gold Mining Complex with Tailings Management <i>Ziad Saliba (presented by Daniel Morales)</i>
<b>10:45 – 11:00</b>	<b><i>Coffee Break</i></b>
11:00 – 11:30	Updating Short-Term Production Plan of Mining Complexes with New Information, Fast Mechanism using Search Trees and Reinforcement Learning <i>Ashish Kumar</i>
11:30 – 12:00	A Matheuristic Approach for Optimizing Mineral Value Chains under Uncertainty <i>Amina Lamghari</i>
12:00 – 12:30	High-Order Stochastic Simulation via Statistical Learning in Reproducing Kernel Hilbert Space <i>Lingqing Yao</i>
<b>12:30 – 13:00</b>	<b><i>Lunch</i></b>
13:00 – 14:30	<b>Workshop – Simultaneous Stochastic Optimization of a Mining Complex in the COSMO Suite Framework</b> <i>Ashish Kumar, Fernanda Del Castillo S., and Joao Pedro de Carvalho</i>
14:30 – 15:00	Multi-Product Mine Scheduling Optimization under Multi-Element Geological Uncertainty <i>Zeyneb Brika</i>
<b>15:00 – 15:15</b>	<b><i>Coffee Break</i></b>
15:15 – 15:45	Effects of High-Order Simulations on the Simultaneous Optimization of a Mining Complex <i>Joao Pedro de Carvalho</i>
15:45 – 16:15	Simultaneous Stochastic Optimization of a Gold Mining Complex Focusing on Waste Management and Cut-Off Grade Optimization <i>Zachary Levinson</i>
16:15 – 16:45	Simultaneous Stochastic Short-Term Production Scheduling of Mining Complexes <i>Christian Both</i>
<b>16:45</b>	<b><i>Closing Remarks: Research in the Year Ahead</i></b>