

**DIM ESEE-2 innovation workshop: Innovation in extraction**  
**18 – 20 October 2023, Dubrovnik**

**DRAFT Topics**

|  |   |
|--|---|
| <p>Day 1: Blasting Extraction Methods</p> <ul style="list-style-type: none"> <li>• Blasting technology trends</li> <li>• Low-impact mining</li> <li>• Next-gen explosives</li> <li>• Blast design software</li> </ul>  | <ul style="list-style-type: none"> <li>• Mark Ganster / AustinPowder: Advanced technologies in blast modelling using electronic detonators</li> <li>• Mark Ganster / AustinPowder: Case study: Improving mill throughput by blast optimization using advanced technologies</li> <li>• Philipp Hartlieb / MUL: The influence of confinement on detonation parameters</li> <li>• <i>Alex Tscharf / MUL: Drone survey of blasting results (to be confirmed)</i></li> </ul> |
| <p>Day 2: Mechanical Extraction Methods</p> <ul style="list-style-type: none"> <li>• Hardrock cutting</li> <li>• Sandvik</li> <li>• Epiroc</li> </ul>  | <ul style="list-style-type: none"> <li>• Nikolaus Sifferlinger / MUL: latest developments in hard rock cutting</li> <li>• Hubert Kargl / Sandvik: Cutting for hard rock development, the MX650 experience</li> <li>• Morgan Rody / Epiroc: The EPIROC Mobile Miner</li> </ul>   |
| <p>Day 3: Innovative &amp; Sustainable Extraction Practices</p> <ul style="list-style-type: none"> <li>• Environmental impacts</li> <li>• Operational Improvement Methods</li> <li>• Automation&amp;Safety</li> <li>• Water-assisted cutting</li> <li>• Microwave-assisted excavation</li> </ul> | <ul style="list-style-type: none"> <li>• Nikolaus Sifferlinger / MUL: Resilient Bio-inspired Modular Robotic Miners - the <i>Robominer</i> project</li> <li>• Chr. Heiss / MUL: Safety Concept for production blasting in populated areas (Leitendorf best-practise case)</li> <li>• Philipp Hartlieb / MUL: The Digitalized Mining Process - <i>IlluMINEation</i> project</li> </ul>   |