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| **Day 1 – October 10th** | | | | |
| **Time** | **Duration** | **Presenter** | **Subject** | **Affiliation** |
| 08:15 | 00:55 | Registration | | |
| 09:10 | 00:10 | J. Carpenter | Welcome, introduction remarks, workshop objectives | ESA |
| 09:20 | 00:10 | D. Parker | Keynote speaker | ESA |
| 09:30 | 00:10 | P. Worden | Keynote speaker | Breakthrough Starshot |
| 09:40 | 00:10 | J. Mousel | Outcome Mining Space Summit | LSA |
| 09:50 | 00:10 | C. Neal | Outcome US ISRU Workshop | U. Notre Dame |
| 10:00 | 00:10 | J. Alves | ISRU Gap Analysis | ISECG |
| 10:10 | 00:10 | J. Carpenter | ESA Strategy | ESA |
| 10:20 | 00:10 | G. Sanders | NASA Strategy | NASA |
| 10:30 | 00:10 | B. Hufenbach & M. Link | Agency updates | ESA & Luxembourg Space Office |
| 10:40 | 00:10 | Q&A – Strategic goals | | |
| 10:50 | 00:10 | D. Inocente | Space Resources Vision | SOM |
| 11:00 | 00:30 | Coffee Break | | |
| **Economics of Space resources** | | | Chairs: M. Link, A. Sommariva | |
| 11:30 | 00:15 | M. Link | Overview economics of Space resources | LSA |
| 11:45 | 00:10 | D. Britt | Economics and Exploration: historical perspective on our new age of exploration | UCF |
| 11:55 | 00:10 | K. Acierno & C. Espejel | Transportation enabling ISRU & SRU value chain | ispace |
| 12:05 | 00:05 | N. Bennett | GTO as a market for lunar ISRU propellant | Australian Center for Space Engineering Research |
| 12:10 | 00:05 | A. Sommariva | The economics of Moon Mining | SDA Bocconi School of Management |
| 12:15 | 00:05 | J.K. Schingler | Open Architecture | Open Lunar Foundation |
| 12:20 | 00:05 | S. Drake | Space Resource Business Models: from concepts to funding | Space Ventures Investors Ltd |
| 12:25 | 00:05 | K. Kaysin | Space technology contests as an approach to establishing sustainable business models | RVC |
| 12:30 | 00:05 | P.J. Blount | The Role of coordination and cooperation in building a Global Space Resources Regime | U. de Luxembourg |
| 12:35 | 00:40 | **Interactive session, all last speakers on stage: What is the priority in the next 3-5 years?** | | |
| 13:15 | 01:00 | Lunch | | |
| **Prospecting** | | Chairs: C. van der Bogert, J. Carpenter | | |
| 14:15 | 00:15 | C. van der Bogert | Overview volatiles, and lunar regions of interest | U. Münster |
| 14:30 | 00:05 | G. Patterson | Water ice on the Moon: What we know versus what we still have to learn | JHUAPL |
| 14:35 | 00:05 | R. Fisackerly | PROSPECT: Status and Development | ESA |
| 14:40 | 00:05 | J. Prinetto | A compact surface sampling mechanism with integrated bio-analyzer | PoliMi |
| 14:45 | 00:05 | A. Calzada Diaz | Polar Ice Explorer: ispace's first resource exploration mission | ispace |
| 14:50 | 00:05 | P. Harkness | Autonomous drilling and sampling technologies | U. Glasgow |
| 14:55 | 00:05 | M. Sabbatini | Prospecting Technologies – Maximising the interaction of aerial and ground robots for autonomous exploration tasks | ESA |
| 15:00 | 00:05 | M. Hunter-Scullion | Asteroid Resource Prospecting using pre-existing technologies | Asteroid Mining Corporation Ltd. |
| 15:05 | 00:40 | **Interactive session, all last speakers on stage: What is the priority in the next 3-5 years?** | | |
| 15:45 | 00:10 | Group Photo | | |
| 15:55 | 00:25 | Coffee Break | | |
| **Regolith Excavation and Processing** | | | Chairs: K. Hadler. M. Sperl | |
| 16:20 | 00:15 | K. Hadler | Overview + topical team | ICL |
| 16:35 | 00:05 | G. Just | Critical Review of Regolith Excavation Techniques for Lunar ISRU and Suggested Experimental Parameters | U. of Manchester |
| 16:40 | 00:05 | H. Wotruba | Mineral Processing in Space | RWTH Aachen |
| 16:45 | 00:05 | C. Rossi | Robominers: from deep underground to deep space | UP Madrid |
| 16:50 | 00:05 | R. Aked | Development of key technologies towards space resources utilisation | SAS |
| 16:55 | 00:05 | P. Hartlieb | Alternative fragmentation concepts for possible space mining applications | Montanuniversitaet Leoben |
| 17:00 | 00:05 | R. Bamford | The case for plasma drilling technology | RAL Space |
| 17:05 | 00:05 | N. Vandewalle | The physics of granular materials, a key ingredient for space exploration and exploitation | U. de Liege |
| 17:10 | 00:05 | M. Adachi | Mitigation and Transporting Technologies for Regolith Using Electrostatic, Magnetic, and Vibrational Forces | DLR Cologne |
| 17:15 | 00:05 | R. González-Cinca | What is the right power supply architecture for a mission on the Moon? | UPC Barcelona |
| 17:20 | 00:05 | C. Lindley | Resource Modelling Methods for Small Solar System Bodies | CSIRO |
| 17:25 | 00:05 | A. Wedler | DLR Robotics to be used in ISRU applications | DLR Munich |
| 17:30 | 00:40 | **Interactive session, all last speakers on stage: What needs to be done? What is the priority in the next 3-5 years?** | | |
| 18:10 | 00:10 | **Wrap-up discussions and conclusion of the 1st day** | | |
| 18:20 -19:00 | Networking reception | | | |

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| **Day 2 – October 11th** | | | | | | |
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| 08:30 | 00:10 | **Introduction** | | | | |
| **Oxygen and Water from Regolith and Polar Volatiles** | | | Chairs: A. Meurisse, B. Lomax | | |
| 08:40 | 00:15 | A. Meurisse | Overview Water and Oxygen extraction | ESA | |
| 08:55 | 00:10 | D. Binns | Summary of the ESA ISRU Demonstration Campaign | ESA | |
| 09:05 | 00:05 | J. Brisset | In-Situ Water Extraction on the Lunar Surface | UCF | |
| 09:10 | 00:05 | L. Schütler | In-Situ Extraction, Separation, Purification and Usage of Oxygen and Water | ESA | |
| 09:15 | 00:05 | B. Baratte | H2O to O2 and H2 production in Space for Life and Energy Support | Air Liquide | |
| 09:20 | 00:05 | B. Lomax | The Metalysis-FFC process: oxygen and metals from lunar regolith | U. Glasgow | |
| 09:25 | 00:05 | A. Dietz | Electrowinning of metals and oxygen from moon regolith | Fraunhofer IST | |
| 09:30 | 00:05 | T. Denk | Terrestrial Demonstrator for Hydrogen Reduction of Lunar Regolith with Highly Concentrated Solar Radiation | Ciemat-PSA | |
| 09:35 | 00:05 | A. Boiron | Hydrogen Peroxide use on the Moon | Nammo | |
| 09:40 | 00:05 | S. Vijendran | Mars In-situ Resource Utilisation: Where are the synergies and differences with lunar applications? | ESA | |
| 09:45 | 00:40 | **Interactive session, all last speakers on stage: What needs to be done? What is the priority in the next 3-5 years?** | | | |
| 10:25 | 00:30 | Coffee Break | | | |
| **Materials and Construction** | | | Chairs: A. Makaya, S. Linke | | |
| 10:55 | 00:15 | A. Makaya | Overview Materials and Construction | ESA | |
| 11:10 | 00:05 | S. Linke | Progress in Regolith Simulant Development and related ISRU Technologies | TU Braunschweig | |
| 11:15 | 00:05 | P. Metzger | The First Use of Space Resources: Constructing Landing Pads from Lunar Materials | UCF | |
| 11:20 | 00:05 | Y. Akisheva | Strategy of Regolith Utilisation as Radiation Protection of Human Habitats for Long Duration Expeditions on the Moon and Mars | ISAE-Supaero | |
| 11:25 | 00:05 | M. Arnhof | Lunar regolith geopolymer reinforced with basalt fibre for construction on the Moon | ESA | |
| 11:30 | 00:05 | M. Peroni | Active Shielding For Moon Base City | Marco Peroni Ingegneria | |
| 11:35 | 00:05 | J. van Oorschot | Developing a power infrastructure on the Moon by first developing it on Earth | Maana Electric | |
| 11:40 | 00:05 | S. Lim | Microwave heating as a fabrication method for an extra-terrestrial construction process | Open University | |
| 11:45 | 00:05 | A. Niecke | MoonFibre - Fibres from Lunar Regolith | RWTH Aachen | |
| 11:50 | 00:40 | **Interactive session, all last speakers on stage: What needs to be done? What is the priority in the next 3-5 years?** | | | |
| 12:30 | 00:30 | Wrap-up & Closure | | |  | |
| 13:00 | Close | | | | | |

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| **Posters** | | |
| **Name** | **Affiliation** | **Title** |
| R. Trimlett | The Royal Brompton & Harefield NHS Foundation Trust | Additive Manufacturing, Artificial Heart Support or Robotic Surgery |
| M. Zorzano | National Institute of Aerospace Technology | Photocatalytic chemistry in space for ISRU |
| K. Kanawka | Blue Dot Solutions | 3D printing - small 'building blocks' for exploration |
| P. Harkness | University of Glasgow | Autonomous drilling and sampling technologies |
| A. Wedler | DLR Robotic | DLR Robotics to be used in ISRU applications |
| Stefan Linke | TU Braunschweig | The underestimated space resource: space debris |
| C. Lindley | Commonwealth Scientific and Industrial Research Organisaiton (CSIRO) | Resource Modelling Methods for Small Solar System Bodies |
| R. Anyszka | University of Twente | How to design rubber materials withstanding Martian environment? |
| R. Velho | University of Warwick | Medical resource limitations for human space flight - lessons learnt from terrestrial space analogue missions |
| D. Fekede | Dire Dawa University | Dynamics of Interplanetary Magnetic Field in Space weather |
| E. Rabadan Santana | University of Luxembourg | Steam Propulsion and Simulation Environment Technologies for ISRU and Prospecting Missions |
| M. Lavagna | Politecnico di Milano | Towards Oxygen extraction from Moon regolith: the ground tests main achievements |
| S. Govindaraj | Space Applications Services | PRO-ACT: Planetary Robots Deployed for Assembly and Construction of Future Lunar ISRU and Supporting Infrastructures |
| A. Niecke | RWTH Aachen University | MoonFibre - Fibres from Lunar Regolith |
| J. Rasera | Imperial College London & ispace Europe SA | The electrostatic beneficiation of lunar regolith |
| T. McNeilly | Ötzibrew | Innovative Applications for the Use of Mushrooms in Space |
| N. Bowles | University of Oxford | The Lunar Trailblazer, a small satellite for remote sensing of lunar water and surface composition |
| F. Prenafeta-Boldú | Institute of Agrifood Research and Technology (IRTA) | Fungal melanin, an overlooked organic material for innovative applications in space technology? |
| A. Cassaro | University of Tuscia, | Towards lunar exploration: Lessons from terrestrial organisms and their journey in space |
| S. Sheridan | The Open University | Volatile characterisation instruments of ISRU |
| M. Faber | ESA | Production of high-fidelity "homebrew" regolith simulants for reliable ISRU process demonstration |
| C. Espejel | ispace | SRU Value Chain and Reporting of Space Resources and Space Reserves |
| R. McCandless | Signaluna Ltd | SphereX Robotic Platform for Exploration and Resource Prospecting In Low Gravity Environments |
| D. Karl | Universitaet Berlin, | Wet-processing and sintering of ceramics from Martian soil simulants using slip casting or Additive Manufacturing for in-situ resource utilization on Mars |
| L. Rabagliati | Politecnico di Torino | Modular Lunar Facility for In Situ Propellant Production |
| M. Sperl | Institute of Materials Physics | From Small Grains to Big Risks: Process Engineering in Unknown Environments |
| M. Giuliani | Politecnico di Torino | Optimal orbit selection for refuelling operations in cislunar space |
| D. Lucsanyi | Puli Space Technologies Ltd. / | Simulations and analysis of the lunar surface radiation, dusty plasma and thermal environments |
| J. W. Schroeder | CisLunar Industries S.A. | Recycling Space Debris: Utilizing the Most Readily Available Space Resource |
| G. Schmidt | NASA | SSERVI: Building scientific understanding for ISRU |
| F. Venditti | OHB Italia | Oxygen extraction from lunar regolith |
| D. Cullen | Cranfield University | Towards CubeSat-compatible payloads for early in situ demonstration / de-risking of key ISRU steps on NEO's, Moon and Mars |
| P. Vyshnav | F-drones | Vision-based Navigation of Autonomous Mobile Robots for Lunar Resource Prospecting |
| A. Dempster | UNSW | The Wilde Project |
| J. M. Trigo-Rodriguez | Institute of Space Sciences (CSIC-IEEC) | Water, precious metals and rare Earths in primitive chondritic asteroids |
| Y. Pennec | Air Liquide Advanced Technologies | Purification Technologies for Lunar Oxygen Extraction |
| H. Broughton | Hugh Broughton Architects | Antarctic Research Stations: Extreme Architecture on Earth as precursors for Architecture in Space |
| M. Dudziak | The TETRAD Institutes | Project ASTRIC and Project TETHYS |
| J. Biswas | Technical University of Munich | The Lunar Volatiles Scout for in-situ volatiles extraction and analysis” |
| S. Ben Hamida | EPFL | Identifying Space Logistics Needs for the Sustainable Use of Space Resources |
| C. Waldvogel | Spherene | The Moon Fountain |