



## IGLUNA 2021 Project teams

| Research field             | Project | Title                              | Project description  | University                                    |
|----------------------------|---------|------------------------------------|--|---|
| Life Support               | P01     | <a href="#">GrowBotHub</a>         | Structure to produce fresh vegetables everyday in a closed loop and autonomous way   | EPFL, Switzerland                             |
|                            | P02     | <a href="#">LOOPS-M</a>            | Lunar greenhouse using a bio regenerative waste recovery system and an automated cultivation system  | La Sapienza University of Rome, Italy         |
|                            | P03     | <a href="#">LUIEE</a>              | Extraction of water ice by a rover where the water will be then processed to obtain oxygen and hydrogen through electrolysis               | TU Berlin, Germany                            |
|                            | P04     | <a href="#">SAMPLE 2</a>           | Life-supporting system of closed modules that enable plants to grow autonomously in an extreme environment                                 | Warsaw University of Technology, Poland       |
| Conception & Structure     | P05     | <a href="#">AIX2SPACE</a>          | Automated spinning unit producing mineral fibres from processable raw materials such as regolith and working under microgravity conditions | RWTH Aachen, Germany                          |
|                            | P06     | <a href="#">Inflatable Habitat</a> | Inflatable and flexible dome structure with a stable support structure, adapted to human activities and able to face extreme conditions    | Brandenburg University of Technology, Germany |
| Navigation & Communication | P07     | <a href="#">CoRoDro</a>            | Autonomous navigation of a rover and a drone to map and move together in an unknown environment  | ISAE-SUPAERO, France                          |
|                            | P08     | <a href="#">LIGHT2</a>             | Gadget based on augmented reality technology for the navigation and assistance of astronauts on lunar exploration missions                 | Aristotle University of Thessaloniki, Greece  |
|                            | P09     | <a href="#">Lunar Zebro</a>        | Swarm of small, robust and intelligent rovers able to drive on the rough surface of the Moon thanks to its C-shape legs                    | Delft University of Technology, Netherlands   |
|                            | P10     | <a href="#">MISTLab</a>            | Infrastructure for a swarm of autonomous, self-organized and small robots controlled by a single audio-visual interface                    | Polytechnique Montreal, Canada                |
|                            | P11     | <a href="#">REBELS</a>             | Development of a rover for sintering and enabling the 3D printing of solid geometric structures for a lunar base                           | TU München, Germany                           |



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|------------------|-----|--------------------------|---|--|
| Power Management | P12 | <a href="#">PowerHab</a> | <i>Complete power supply for a lunar habitat with energy generation, storage, control and distribution systems</i>  | Strathclyde University, United Kingdom |
| Human Well-being | P13 | <a href="#">Ray</a>      | <i>Using light as a way to improve the well-being of astronauts during long-duration space missions in narrow, confined and unusual living conditions</i> | Politecnico di Milano, Italy           |