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SPACE EXPLORATION SYMPOSIUM (A3)
Space Exploration Overview (1)

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TOWARDS A SCIENTIFIC PERSPECTIVE FOR INTERNATIONAL HUMAN-ROBOTIC SPACE EXPLORATION

Abstract

The Global Exploration Roadmap (GER), first published in 2011 and updated in 2013 by the International Space Exploration Coordination Group (ISECG), describes a coordinated perspective for human-robotic space exploration beyond low-Earth orbit. This roadmap includes the coordinated planning of a dozen space agencies around the world.

The GER is driven by high-level objectives with a strong scientific component. In that respect, ISECG decided in 2014 to interact with the scientific community to better address the scientific opportunities of the near-term exploration activities. ISECG therefore initiated the development of a Science White Paper, primarily shaped by the scientific community (through expert representatives) and in an open, transparent process. This document will address the scientific themes of investigation at the exploration destinations, i.e. the Moon – including cis-lunar space –, near-Earth asteroids, and Mars. It will also highlight the science opportunities provided by the GER.

The coordinated effort between ISECG and the international science community will allow a strong scientific voice towards the ISECG agencies when they are discussing future updates of the exploration planning and further details of the near-term missions. The resulting Science White Paper will be published together with the next version of the GER.

An overview of the status of the Science White Paper development will be provided. The aim is to stimulate feedback and further involvement from scientists where appropriate.