27th IAA SYMPOSIUM ON HUMAN EXPLORATION OF THE SOLAR SYSTEM (A5)
Human Exploration of the Moon and Cislunar Space (1)

Author: Dr. Rachel Klima
Johns Hopkins University Applied Physics Laboratory, United States

Prof. Clive Neal
University of Notre Dame, United States
Dr. Erica Jawin
Smithsonian Institution, United States
Dr. Carle Pieters
United States
Prof. Michelle Hanlon
University of Mississippi School of Law, United States
Dr. James Keane
Caltech/JPL, United States
Dr. Timothy Livengood
University of Maryland and NASA Goddard Space Flight Center, United States
Dr. Jessica Barnes
University of Arizona, United States
Dr. Minna Adel Rubio
National Aeronautics and Space Administration (NASA), Johnson Space Center, United States
Dr. Timothy Glotch
Stony Brook University, United States
Dr. Paul Byrne
Washington University in St. Louis, United States
Mr. Gregory K. Schmidt
National Aeronautics and Space Administration (NASA), Ames Research Center, United States

INTERNATIONAL LUNAR YEAR 2027: ADVANCING LUNAR SCIENCE AND EXPLORATION GLOBALLY

Abstract

Over the last two decades, an international program of lunar exploration has continued to pick up speed, with over ten countries launching missions towards the Moon, successful robotic landings by several of them, and plans for humans to return to the surface and begin—for the first time—to learn how to live and work on another planetary body. Multiple commercial companies are designing and launching lunar landers, heralding unprecedented public access to the lunar surface. The Moon is a celestial body with deep cultural meaning to a great number of populations across planet Earth. Thus, it is important to engage the whole world as the next fundamental science and exploration steps are taken.

The importance of worldwide engagement in the science and exploration of the Moon is well established. Numerous organizations, including the International Lunar Exploration Working Group (ILEWG), the Moon Village Association, and the International Space Exploration Coordination Group (ISECG), have been developing roadmaps for international partnerships in lunar exploration, engaging countries that have not historically been a part of space exploration efforts. The International Lunar Year of 2027

(ILY2027) seeks to build on the strong foundation that these organizations have lain by forging a sustained campaign of collaborations involving scientists, policy makers, commercial entities, educators, and the public throughout the world, to establish together new guidelines and standards for exploration and for disseminating scientific data.

ILY2027 follows the tradition set by the International Geophysical Year of 1957–58, which advanced science, drove political collaborations, and caught the attention of the global public. ILY2027 seeks participation from diverse communities to collect and analyze data to understand the lunar environment, navigate challenging political issues such as resource utilization, protect the myriad historical, cultural, and scientific aspects of the Moon, and establish standards for operation as different countries and commercial companies move towards extended operations on the lunar surface. At the International Astronautical Congress, we will present initial high-level scientific and cultural goals for ILY2027, with the aim of broadening involvement and engaging nations and other interested parties across the world.