

IAF SPACE EXPLORATION SYMPOSIUM (A3)
Moon Exploration – Part 1 (2A)

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ILOA ON THE MOON? NOVEMBER 2021 UPDATE

Abstract

While UAE welcomes international delegates to Dubai for the 2021 IAC and its nation is celebrated for sending ‘Hope’ to inspired onlookers globally - International Lunar Observatory Association (ILOA Hawai’i) continues advancing astronomy and communications from the Moon and is working to have its first of 5 Moon missions ready for Intuitive Machines IM-1 Nova-C lunar lander flight on SpaceX Falcon 9 rocket NET October 2021.

The precursor ILO-X payload instruments will attempt Galaxy First Light Imaging, pioneer Astronomy on and from the Moon, and act as a testbed for more advanced technologies for ILO-1 flagship mission to the Moon South Pole, and its back-up ILO-2 being developed by Canadensys Aerospace.

ILOA will be working with its first dedicated Lunar Astronomers to help prepare for, enhance and share ILO-X Milky Way Galaxy images with the ILOA Galaxy Forum network. Galaxy Forums are designed to expand 21st Century Education with a focus on cutting-edge science, exploration, local perspectives and traditional knowledge. The first image of the Milky Way Galaxy from the Moon surface is an astronomical and astronautical achievement that may influence generations to realize humanity’s future out into the stars.

Galaxy Forum program has held over 100 events in over 16 countries; and at least 7 ‘hybrid’ in-person / online events may take place this year. The First Women on the Moon initiative is a highly significant component of the Human Moon Mission exploration effort, now working with the Moon Village Association and others.

ILOA is collaborating with National Astronomical Observatories of China to co-sponsor a dedicated researcher to analyse Lunar-based Ultraviolet Telescope (LUT) data from Chang’e-3 and publish scientific results. ILOA hopes to contribute to the NASA Artemis program which may be the first to land women at the Moon South Pole - for observation, science and settlement – in Peace for All.

2020s Astronomy from the Moon expands as NASA is hosting / supporting astrophysics and observation payloads aboard SLS flights and CLPS landers; and China pioneers with Netherlands-China Low Frequency Explorer aboard Chang’e-4 – almost a half-century after USA Apollo 16 Commander John Young obtained astronomical images with a Far-UV spectrograph camera.

India astrophysicists have expressed interest in lunar-based astronomy, as have astronomers in Europe, Japan, Russia, Canada, Korea, Crescent Moon Countries, and independent enterprises – all preparing for 2020s Cislunar development and the evolution of a Multi World Civilization.