

ILMF Keynote: Lidar In Exploring the Moon and Mars



The International Lidar Mapping Forum (ILMF) has announced that Dr. Michael Zanetti, Planetary Scientist at NASA's Marshall Space Flight Center, will give a keynote presentation titled *Bringing Light (Detection and Ranging) into Shadow: The Role of Lidar in Exploring the Moon*. This keynote is the second of several available to attendees of both ILMF and the co-located ASPRS Annual Conference, taking place 23-25 March at the Walter E. Washington Convention Center in Washington, DC.

Dr Michael Zanetti, a lunar and planetary geologist, will discuss NASA's Artemis program, which aims to land the first woman and next man on the Moon by 2024, as well as their goal to have sustainable lunar exploration by 2028 in preparation for future Mars missions. The target is the Moon's South Pole, an area of strategic importance that presents

significant benefits and challenges, both related to persistent sunlight and shadows. Dr Zanetti will introduce the Artemis program and examine the role for lidar in reconnaissance, landing hazard avoidance, and terrain navigation and mapping in aiding exploration of the Moon and Mars. [A full description of the keynote can be found here.](#)

Lidar for planetary exploration

"We are honoured to have Dr Zanetti, a researcher leading the way in the development of Lidar's use in planetary exploration, speak at [ILMF](#) this year," said Lisa Murray, group director at Diversified Communications. "It will be fascinating to learn about the future of this technology in helping us understand and map the Moon's South Pole."

Dr Zanetti specializes in Comparative Planetology, using field investigations on Earth as analogues to better understand geologic processes and features seen in remote-sensing data from the Moon and Mars. He is currently the project manager and principal investigator for the Kinematic Navigation and Cartography Knapsack (KNaCK) Lidar system, a mobile Doppler Lidar terrain mapping and navigation technology development project funded by NASA's Science and Technology Mission Directorate (STMD) Early Career Initiative (ECI).

"We're thrilled to add Mike as a keynote speaker for ILMF," added Bill Emison, conference chair at Diversified Communications. "I'm looking forward to hearing about his research work using Lidar for NASA's planned 2024 trip to the Moon, which presents many difficult challenges."

Registration for the 20th edition of ILMF, taking place with the [ASPRS](#) Annual Conference and the MAPPS Federal Programs Conference, as part of [Geo Week](#) 2020, is now open. Event organizers recommend [registering](#) early for the best price and to avoid lines onsite.