

## Mei-Yun Lin, Ph.D.

*NASA Jack Eddy Postdoctoral Fellow*

### Metals from the Moon? A Comprehensive Study of Metallic Ions in the Magnetosphere



**DATE:** Wednesday, August 20, 2025

**TIME:** 11:00 AM – 12:00 PM MT (VIRTUAL)

**[WATCH THE LIVE WEBCAST](#)**

**Mei-Yun** is currently a NASA Jack Eddy Postdoc Fellow hosted by Dr. Andrew Poppe in Space Sciences Lab, University of California Berkeley. She obtained her Ph.D. (2023) and M.S. degree (2020) from the Department of Electrical and Computer Engineering in University of Illinois at Urbana-Champaign, advised by Prof. Raluca Ilie. She will join the Department of Electrical and Computer Engineering at University of Massachusetts Lowell as a tenured-track Assistant Professor in Fall 2025. Her research focuses on understanding the variations of the near-Earth environment, including the Moon, in response to the space weather using numerical modeling and data analysis.

**SUMMARY:** The sources and transport pathways of heavy ions significantly impact Earth's response to solar wind, which is commonly referred to as "space weather." While previous studies have mainly focused on the ionosphere as a source, my presentation will investigate the Moon's plasma as a potential new contributor by tracing metallic ions. These metallic ions are commonly found in the lunar environment and originate from the lunar exosphere. They become particularly significant as the Moon moves in and out of the solar wind and magnetosphere during its orbit.

photo credit: NASA

**CONTACT:** CPAESS Discovery Seminars Coordinator Dawn Mullally [mullally@ucar.edu](mailto:mullally@ucar.edu)

Cooperative Programs for the Advancement of Earth System Science

Boulder, CO • [cpaess.ucar.edu](http://cpaess.ucar.edu)