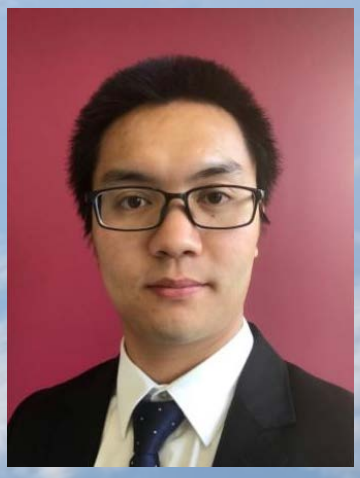
BOSTON UNIVERSITY

Boston University College of Arts & Sciences
Center for Space Physics

2025 SPACE PHYSICS SEMINAR SERIES

Explore the "Traffic" between the Earth's Atmosphere and Geospace Environment

The boundary between Earth's atmosphere and outer space is commonly set at the Kármán line, around 100 km altitude. While this altitude is useful for regulatory purposes, the transition from atmosphere to space is a gradual and intricate process, shaped by fundamental physical connections. Much like the richly varied world of Middle-earth—home to diverse beings such as Men, Hobbits, and Orcs—the geospace environment comprises distinct plasma populations, each requiring unique physical descriptions. These regions are linked to our atmosphere through Earth's magnetic field lines, which serve as pathways for charged particles, electromagnetic fields and waves, and heat flow. In this seminar, I will explore the key "traffic" connecting the atmosphere and geospace environment, covering the fundamental processes governing these interactions, their importance in understanding the coupled atmosphere-geospace system, and their role in space weather.



Thursday April 24th

3:30 - 4:30 p.m.

725 Commonwealth Ave | Room 502

Dr. Dong Lin

NSF/NCAR High Altitude Observatory