

Dr. Michael Mendillo

Prof. of Astronomy and Prof. of Electrical and Computer Engineering at Boston University

Michael Mendillo is a Professor of Astronomy and Professor of Electrical and Computer Engineering at Boston University. He leads a research group in space physics that has developed new low-light-level imaging techniques for observations of emissions from the atmospheres of the Earth, Planets and Moons in the Solar System.

At Earth, studies of atmospheric waves, solar-terrestrial super-storms and plasma instabilities in the ionosphere are conducted using all-sky cameras at three sites in each hemisphere, radar observatories, satellite data, and the global network of global positioning system (GPS) receiving stations. Current emphasis is on understanding the role of coupling from above and below in both observational and modeling studies.

In areas of Planetary Astronomy, Professor Mendillo's group studies the very large-scale, though tenuous, escaping atmospheres (called "exospheres") associated with Jupiter's moons lo and Europa, our Moon, and the planet Mercury.