

Astronomy 5835 -- Interdisciplinary Lunar Science Seminar Spring 2010

Tuesdays, 4-4:50 pm, Duane E-126

Instructors: Drs. Jack Burns (APS), Mihaly Horanyi (Physics), Bill Bottke (SwRI)

This interdisciplinary seminar will cover three broadly defined areas of lunar science:

- ***Of the Moon:*** Investigations of the nature and history of the Moon (including research on lunar samples) to learn about this specific object and thereby provide insights into the evolution of our solar system
- ***On the Moon:*** Investigations of the physics of the lunar surface, including its interactions with the solar plasma and UV radiation. Existing dust and plasma observations and the new ideas for future surface experiments.
- ***From the Moon:*** Use of the Moon as a platform for performing scientific investigations, including observations of the Earth and the wider cosmos that are uniquely enabled by being on the lunar surface.

Last year, the NASA Lunar Science Institute (NLSI) created 7 teams/centers to explore all three aspects of lunar science. Three of these teams/centers are located in Boulder and cover the above three areas. They include:

- (1) *The Center for Lunar Origin and Evolution (CLOE)* led by Bill Bottke (http://lunarscience.arc.nasa.gov/file_download/19/CLOE_summary.pdf),
- (2) *The Colorado Center for Lunar Dust and Atmospheric Studies (CCLDAS)* led by Mihaly Horanyi (<http://lasp.colorado.edu/ccldas/>), and
- (3) *The Lunar University Network for Astrophysics Research (LUNAR)* led by Jack Burns (<http://lunar.colorado.edu>).

This seminar will discuss topical research papers in these broad areas of lunar science covered by the NLSI Boulder centers and explore synergies between them.