Heliophysics 2014 Summer School

Special Opportunity for Students & Teachers

Comparative Heliophysics
July 9-16, 2014 - Boulder, CO

Deadline is 22 February

Applications are invited for the 2014 Heliophysics Summer School, which will be held in beautiful Boulder, Colorado. We are seeking students and undergraduate level teachers and instructors to join us this coming summer for a unique professional experience. Students and teachers will learn about the exciting science of heliophysics as a broad, coherent discipline that reaches in space from the Earth's troposphere to the depths of the Sun, and in time from the formation of the solar system to the distant future. At the same time, a goal of the Summer School is for the group of instructors to develop materials from Heliophysics that can be applied in their classes.

The Heliophysics Summer School focuses on the physics of space weather events that start at the Sun and influence atmosphere, ionosphere and magnetosphere of Earth and their counterparts around the other planets throughout the solar system. The solar system offers a wide variety of conditions under which the interaction of bodies with a plasma environment can be studied, while the rich variety of exoplanet systems being discovered and modeled offers an even richer ground to explore. Similarly rich is the variety of activity phenomena seen on stars like the Sun: where our limited lifespan offers us only a direct view of solar activity for its present-day evolutionary status, comparative stellar astrophysics enables us to effectively study solar conditions for ensembles of thousands of years of solar time, and thereby to explore solar and heliospheric activity in distant past and future.

The 2014 Summer School will focus on the foundations of heliophysics while exploring connections to adjacent disciplines from the perspective of our local cosmos: stars like the Sun, planets like those in the solar system, and formation histories not too dissimilar from those that are relevant to understanding the formation, evolution, and present state of our immediate space environment.

The school will be based on lectures, laboratories, and recitations from world experts, and will draw material from the three textbooks Heliophysics I-III, published by Cambridge University Press.

Several teachers along with about 35 students will be selected through a competitive process organized by the UCAR Visiting Scientist Programs. The school lasts for eight days, and each participant receives full travel support for airline tickets, lodging and per diem costs.

Student Application Requirements

- Currently enrolled as a graduate student in any phase of training, or first or second year postdoctoral fellow.
- Major in physics with an emphasis on astrophysics, geophysics, plasma physics, and space physics, or experienced in at least one of these areas.
- Pursuing a career in heliophysics or astrophysics.

Teacher Application Requirements

- At least three years of teaching experience. (Already having a connection with heliophysics is not a requirement.)
- Currently teaching physics (preferably electricity & magnetism), astronomy/planetary science, or Earth sciences at the upper division undergraduate level.
- Willingness to provide feedback to the Summer School faculty and organizers on the comprehensibility and comprehensiveness of the overall set of lectures and supporting materials.

For additional information on this program and instructions on how to apply,
please visit the Heliophysics website at
http://www.vsp.ucar.edu/Heliophysics
For further information, call (303) 497-8649 or e-mail vspapply@ucar.edu