Heliophysics Summer School

24-31 July 2018 - Boulder, CO
Application Deadline: 23 February

"Comparative Heliophysics"

Applications are invited for the 2018 Heliophysics Summer School, which will be held in beautiful Boulder, Colorado. We are seeking students to join us this coming summer for a unique professional experience. They 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.

The 2018 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 (including exoplanets), 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 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 school will be based on lectures, laboratories, and recitations from world experts, and will draw material from the five textbooks: Heliophysics I-IV, published by Cambridge University Press, and textbook V, available online with free access.

Approximately 35 students will be selected through a competitive process organized by the UCAR Cooperative Programs for the Advancement of Earth System Science. 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.**

For additional information on this program and instructions on how to apply, please visit the Heliophysics website at: *heliophysics.ucar.edu*.

For further assistance, call (303) 497-1605 or e-mail cpaess-apply@ucar.edu

heliophysics.ucar.edu

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The Living With a Star program of the Heliophysics Division in NASA's Science Mission Directorate sponsors the Summer Schools. The University Corporation for Atmospheric Research (UCAR) Visiting Scientist Programs collaborates with NASA in administering the schools. The University Corporation for Atmospheric Research is an EE/AAE who values and encourages diversity in the workplace. Image courtesy of NASA, "Parker Solar Probe".

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