Project Details

ROSES ID: NNH11ZDA001N Selection Year: 2012 Program Element: Cross-Discipline Infrastructure Building Programs

Project Title: Heliophysics: Integrating knowledge across disciplines

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Summary:

One of the major challenges facing the Living With a Star Program (LWS) is the development of a research community that crosses traditional discipline boundaries to attack system-wide problems central to understanding and modeling the Sun-Solar System connection. The Visiting Scientist Programs office (VSP) of the University Corporation for Atmospheric Research (UCAR) has partnered with the university community to develop a focused Heliophysics Summer School (held yearly since 2007) and a successful postdoctoral fellowship program (since 2009) to address this challenge. This proposal seeks to establish a multi-year Cooperative Agreement with NASA for the continuation of VSP s successful efforts to facilitate the training and education of a new generation of heliophysicists and support interactions within the heliophysics community.

VSP s Mission: To help prepare the next generation of scientific leaders and workforce by supporting effective and collaborative fellowship, visitor, and workshop programs that meet emerging training and research needs.

In support of the NASA Heliophysics division s long-term goal of developing the scientific understanding needed for the United States to effectively address those aspects of the connected Sun-Earth system that may affect life and society, the Visiting Scientist Programs office helps Earth systems scientists develop a new research community and build productive, collaborative, working relationships.

To reach this goal, VSP:

-Organizes, hosts, and administers the annual Heliophysics Summer Schools to foster learning and development of Heliophysics as a broad, coherent discipline. This includes support in developing additional teaching tools that may include textbooks, problems sets, labs, and distance learning modules.

-Established and administers the Jack Eddy Postdoctoral Fellowship Program, which matches early career PhDs with hosting mentors in order to build a new generation of heliophysicsts.

-Hosts and administers the annual Space Weather Enterprise Forum and Space Weather Workshop to advance collaboration between industry, academia, and government, raising awareness and improving understanding of space weather.

-Proposes to develop and administer the Jack Eddy Summer Institute as part of the fellowship program. When the program has developed a critical mass of program graduates, a biennial workshop will provide ongoing opportunities for alumni to build their community. The young scientists will spend several days sharing and discussing the implications of their science on global policy and societal impacts. Experienced host scientists will also be invited to participate.

Publication References:

no references