JOB OPENING: Postdoctoral Research Scientist in Theoretical/Computational Space Plasma Physics

The Space Science Institute (SSI) invites applications for a Postdoctoral Research Scientist to be based in Los Angeles, CA. The selected candidate will take a leading role in research on ultra low frequency (ULF) waves and associated ion distributions in the Earth's ion foreshock.

The goal of the project is to elucidate the physical processes responsible for the properties and dynamics of ULF waves in the Earth's ion foreshock. The postdoctoral scientist will focus on analysis of existing runs from the Vlasiator global-hybrid simulation code and computation of the ULF wave growth rates using LEOPARD, a new arbitrary distribution function solver. The selected candidate will work with SSI Research Scientist Dr. Seth Dorfman, who will be responsible for the observational aspects of the project. Results will aid our broader understanding of waves generated by energetic particles in ways applicable to present and future space missions.

For more information on the physics, see our paper related to the proposed work:
http://dx.doi.org/10.1002/2017GL072692

Knowledge/Education: A Ph.D. in space plasma physics or related fields is required prior to the start date of the position. Applicants should demonstrate the potential to publish research results in peer-reviewed high-quality journals, good communication skills, and the ability to work independently. No prior experience with Vlasiator or LEOPARD is expected, but applicants should demonstrate computer skills that show they will be able to learn these tools quickly. Experience with computational data analysis and plasma physics theory is considered an advantage.

The appointment is expected to start in April 2020, although exact start date is flexible. The initial appointment will be for 1 year, renewable up to a total of 35 months contingent upon satisfactory performance and continued availability of funds. The position is open to applicants within the US and abroad and will be based in Los Angeles, CA where Dr. Dorfman is a visiting researcher at UCLA. Opportunities therefore exist to interact with UCLA space physics and lab physics groups, including group meetings and seminars. The work will be supported by NASA ECIP (proposal selected in 2019). Planned receipt of the NASA ECIP grant and expected start date of the postdoc appointment is April 2020.

This is a full-time position with benefits. Benefits include health, dental, vision, and (after 1 year of service) 403(b) retirement plan. In addition to competitive salary and benefits, there will be a budget for to the candidate to visit Finland and interact with Prof. Minna Palmroth and the Vlasiator team (essential for learning Vlasiator data analysis). Position, salary, benefits, and travel budget are dependent upon availability of grant funding.

To Apply:

Send application materials to ssihr@spacescience.org and cc sethd at spacescience dot org with "Attn: Dr. Seth Dorfman" in the subject line.

Please include a curriculum vitae, cover letter, statement of research (max 2 pages), and 3 references (including names and contact information). Interviews will be conducted at the 2019 AGU meeting or via Zoom; therefore, please submit your CV to begin the application process ASAP to ensure full consideration.

Contact Dr. Seth Dorfman with questions: https://www.spacescience.org/bio.php?emp=SDORFMAN

Please note: The Space Science Institute is a non-profit, public benefit corporation and operates as an equal opportunity employer. This job description is general in nature and is not designed to contain or to be interpreted as a comprehensive inventory of all duties, responsibilities and qualifications of the position. More information about SSI can be found here: http://www.spacescience.org/