

Institute of Space and Atmospheric Studies

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Position: Postdoctoral Research Fellow

Space Physics (ePOP/SuperDARN) Post-Doctoral Researcher

The Institute of Space and Atmospheric Studies (ISAS) in the Department of Physics and Engineering Physics at the University of Saskatchewan invites applications for a postdoctoral research position in the area of space physics starting in summer 2020. The successful candidate will be part of the dynamic and active radar physics group within ISAS, which includes the SuperDARN Canada research team (http://superdarn.ca/).

The research will focus on the Canadian CASSIOPE ePOP mission (https://epop.phys.ucalgary.ca/), specifically the Radio Receiver Instrument (RRI) in collaboration with ground-based HF radars such as SuperDARN. The purpose of this research is to investigate transionospheric HF radio wave propagation in the terrestrial ionosphere and may also include natural radio wave emissions. The ability to integrate multiple data sets to calibrate and support the RRI studies is essential. Supporting data sets may be from the ePOP satellite itself (GAP, MGF, CER), other satellite missions (ESA Swarm), or ground-based instrumentation (RISR: Resolute Incoherent Scatter Radar). Also, the continued development of a physics based transionospheric ray-tracing model will be part of the analysis.

Qualifications: Candidates must have successfully completed a Ph.D. in the area of space physics within the past five years. Radio/radar physics experience is essential. Demonstrated expertise in data analysis of large datasets is an asset. The successful candidate must demonstrate an ability to work in a highly collaborative, multidisciplinary team environment with other investigators, support personnel and students. A demonstrated ability in publication of results in the scientific literature is required, as are strong written and oral communication skills.

<u>Conditions</u>: The position starts with a 1-year term with the possibility of extension for an additional 6 months (18 months maximum). The renewal is dependent upon satisfactory progress. Salary will follow the university standard for a post-doctoral researcher and will be commensurate with experience. This is a unionized position with benefits.

<u>How to Apply:</u> Applicants will submit a cover letter stating how your background and qualifications match the position, a full curriculum vitae (CV) detailing your education, awards, publications, research experience, etc., and the contact information for three references to:

Dr. Glenn Hussey Professor of Physics and Engineering Physics Institute of Space and Atmospheric Studies (ISAS) Department of Physics and Engineering Physics University of Saskatchewan Saskatoon, SK, Canada

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