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Dr. Mark Rast
University of Colorado, Boulder

Dear Dr. Rast

I am writing this letter in response to your advertisement for a professor at the associate level at the University of Colorado, Boulder. I believe that as a professor at CU I can contribute to the diversity of the Department of Astrophysical and Planetary Sciences and generate opportunities for instrument development. In addition I believe I can promote a close collaboration with the National Solar Observatory as it transitions to its new headquarters.

I received my Ph.D. from the University of Hawaii working with Dr. Haosheng Lin, together we commissioned the Facility Infrared Spectropolarimeter (FIRS) instrument on the Dunn Solar Telescope at Sacramento Peak, NM. As a post-doctoral researcher I have supported the construction, calibration, and operation of the Interface Region Imaging Spectrograph (IRIS). Through these experiences I have become well acquainted with both ground-based and space-based instruments and observations, and have worked closely with researchers in both communities.

I believe that the greatest challenge to solar physics is the accurate measurement of the 3D magnetic field of the Sun from the photosphere to the corona. Greater understanding of the magnetic field can be achieved by combining observations of many wavelengths and from many sources, developing the tools to interpret rich datasets, and understanding the pitfalls of both instruments and analysis techniques. While at CU I intend to pursue a plan for a ground-based high dynamic range spectropolarimeter for observation of the 10830 Å He I line, which will be a key diagnostic for ATST and the Solar-C mission. This project could also provide valuable training to future solar physics instrumentalists.

You will find attached to this email my CV, a statement of research and a statement of teaching philosophy, a full list of references, and proof of my status. You will receive separately letters of recommendation on my behalf from Dr. Haosheng Lin, Dr. Han Uitenbroek, and Dr. Charles Kankelborg. In addition, all of my recent talks and publications are available at <http://solar.physics.montana.edu/jaeggli/pubs.html>. Please do not hesitate to contact me if you find anything lacking, or if you require additional material.

very sincerely,

Sarah Jaeggli