





Assistant or Associate Professor – Experimental/ Instrumentational Space Plasma Physics

West Virginia University

The Department of Physics and Astronomy at West Virginia University invites applications for a tenuretrack faculty position in experimental or instrumentational space plasma physics. We anticipate filling this position at the Assistant Professor level, but exceptional candidates may be considered for appointment at the Associate Professor level. The creation of the position was facilitated by an NSF Faculty Development in the Space Sciences grant. The preferred start date is August 14, 2020. The position requires a Ph.D. or equivalent degree in physics or a closely related field and a commitment and ability to establish an independent externally funded research program, excel in teaching physics at the undergraduate and graduate levels, and support departmental efforts in diversity, equity, and inclusion. The successful candidate will present an excellent record of research productivity as evidenced by publication record and scientific collaborations.

Our space plasma physics program (https://physics.wvu.edu/research/plasma-and-space-physics/) has existing space-relevant experiment and theory/computational strengths of: (1) cubesat technology development; (2) space-relevant laboratory experiment (plasma heating, reconnection, turbulence, thrusters, sheaths, waves and instabilities, and nonlinear wave-wave interactions); (3) solar observations (flares); (4) solar theory and simulation (reconnection and eruptions, dynamo/flux emergence); and (5) magnetospheric theory, simulation, and observations (radiation belts, reconnection), Collaborations are possible with the Department of Mechanical and Aerospace Engineering on spaceflight effects including atmospheric drag and machine learning for thermospheric and magnetospheric modeling. The space plasma physics program includes four Professors and two Research Professors and has a history of success in mentoring students. Other areas of research by the 32 faculty, 80 graduate students, and 75 undergraduate majors in the Department of Physics and Astronomy (http://physics.wvu.edu) are astrophysics, biophysics, condensed matter physics, and physics education. The department moved into a new facility with state-of-the-art research laboratories in 2012, and there is available clean room space. On-campus shared laboratory facilities and shared computational facilities are available; WVU is on the Internet 2 high-speed backbone. The department's faculty includes numerous members from traditionally underrepresented groups, and we energetically support diversity, equity, and inclusion (DEI) as described at https://physics.wyu.edu/about/diversity-equity-and-inclusivity.

WVU is a comprehensive land grant university enrolling nearly 27,000 students on the main Morgantown campus. WVU's Carnegie Classification is R1 ("Doctoral Universities - Very High Research Activity"). Morgantown is centrally located and regularly makes "Best Place to Live" lists because of its good schools, excellent health care, low unemployment rate, low crime rate, and abundant recreational opportunities. WVU provides faculty members with a supportive environment for developing a visible and productive career (https://talentandculture.wvu.edu/new-employees) and commits to assist in partner employment. WVU is an Equal Employment Opportunity/Affirmative Action Employer and welcomes applications from all qualified individuals, including minorities, females, individuals with disabilities, and veterans. WVU is also an NSF ADVANCE Institutional Transformation institution (https:// www.nsf.gov/crssprgm/advance/) and an institutional member of the National Center for Faculty Development and Diversity (https://www.facultydiversity.org).

To apply, please go to <u>https://careers.wvu.edu/career-opportunities</u>, click View Faculty Positions, and navigate to the title listed above. Required documents to upload include: (1) a cover letter, (2) a curriculum vitae including a complete list of publications and relevant teaching experience, (3) a succinct research plan for the next five years, and (4) a statement of teaching philosophy and experience. Arrange for three letters of recommendation to be sent to <u>plasmasearch@mail.wvu.edu</u>. Review of applications will begin November 15, 2019, and will continue until the position is filled. Additional information is available at <u>https://physics.wvu.edu/research/plasma-and-space-physics/wvu-space-plasma-physics-job-opening</u>; please contact <u>Paul.Cassak@mail.wvu.edu</u> with questions.