



College of Arts and Sciences  
Department of Astronomy  
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<http://astronomy.nmsu.edu/mcateer>

11 Sept 2019

FOR OPEN ADVERTISEMENT.

The Department of Astronomy at New Mexico State University invites applications for a new tenure-track faculty position in solar physics, with a focus on diagnosing the fundamental physical conditions in the Sun's atmosphere through spectropolarimetry. This position, with a start date of August 2020, has been created from a grant from the NSF Faculty Development in the Space Sciences Program and is one of 3 new faculty appointments the Department will be carrying out this year. The successful candidate will seek to establish and maintain an active teaching and research program that will

- Contribute to the current solar and space sciences research and education program at NMSU in the advancement of new analytic tools in order to extract physical plasma parameters in the solar atmosphere (magnetic fields, velocities, thermodynamic quantities) from existing and future observational data;
- Integrate research topics in solar and space sciences into astronomy, physics, electrical engineering, geosciences, and computer science by leading efforts to showcase this science in an interdisciplinary setting at NMSU;
- Establish partnerships between NMSU and the academic and research communities across the U.S. by linking the project's discoveries to space weather drivers in the context of the heliosphere.

The candidate will identify how their skills, background, and training are aligned to these objectives in spectropolarimetry, and could include instrumentation, providing simulations for inversions, writing inversion codes, adding to existing codes, or running codes to extract plasma parameters. The successful candidate will have demonstrable synergies with faculty within the Department, and proposed research programs that connect with national observatories, including DKIST, the DST, or proposed facilities such as COSMO.

*Minimum Qualifications:* A Ph.D. in physics or astronomy, and research publications and grants commensurate with experience is required at the time of appointment.

*Desired Qualifications:* Applicants should address (1) potential for establishing a sustained external research funding record in a research area mentioned above, (2) the desire to teach and mentor students at both the undergraduate and graduate levels using evidence-

based pedagogical methods, (3) experience in leading and participating in collaborative research areas, (4) strong existing or proposed scientific connections to NSO and HAO and (5) a commitment to creating a diverse, equitable, and inclusive working and learning environment.

The NMSU Astronomy Department currently has eight faculty, several research faculty and postdocs, and about 30 graduate students, who are involved in a wide range of astronomical research areas. Faculty, staff, and students benefit from our leadership of the Sunspot Solar Observatory, connections to NSO and HAO, and membership in AURA. Additional Department information, including details about our membership in the Astrophysical Research Consortium and its Apache Point Observatory 3.5-meter and SDSS 2.5-m telescope can be found at <http://astronomy.nmsu.edu>.

NMSU is located in Las Cruces, the second largest city in New Mexico with a population of 100,000, located 50 miles from the El Paso airport, and 100 miles from Sunspot. NMSU is a Hispanic Serving Institution that serves a diverse undergraduate and graduate population of 15,000 students.

A complete application includes the following elements: (1) a 1-page cover letter (2) a research statement (up to 3 pages) clearly indicating research backgrounds, skills, and future plans for a career that will meet the three key objectives above, (3) a brief (up to 3 pages) description of teaching experience and philosophy, (4) a 1 page statement on diversity that addresses past and/or potential future contributions to diversity, equity, and inclusion through research, teaching, and/or service, (5) unofficial transcripts of PhD, (6) a curriculum vitae, and (7) names and contact information for three individuals who may be asked to provide letters of reference.

All applications must be submitted through the following link:

<http://jobs.nmsu.edu/postings/36545>

The deadline for receipt of all application materials is November 1, 2019. Questions about the application process or the position should be addressed to:

Dr. James McAteer,  
Chair, Faculty Search Committee,  
[astfaculty@nmsu.edu](mailto:astfaculty@nmsu.edu).

The NMSU Astronomy Department is committed to creating an environment that affirms and supports diversity across a variety of axes, including ethnicity, race, class, ability, gender identity and expression. We particularly welcome applicants who can contribute to such an environment through their scholarship, teaching, mentoring, and professional service. NMSU is an equal opportunity and affirmative action employer committed to assembling a diverse, broadly trained faculty and staff. Women, minorities, people with disabilities, and veterans are strongly encouraged to apply. Offer of employment contingent upon verification of individual's eligibility for employment in the United States.

As a position funded by the NSF Faculty Development in Space Sciences program, submitted materials will be reviewed by NSF during the decision process to determine that the candidate's research and qualifications meet the requirements of NSF's review criteria, and addresses the objectives outlined in the funded Faculty Development in the Space Science proposal. The successful candidate will be assigned as Co-PI on the proposal, along with control over the funds for their own research.

A handwritten signature in black ink, appearing to read "R. T. James McAteer". The signature is fluid and cursive, with the first name "R. T." and the last name "McAteer" clearly distinguishable.

R. T. James McAteer (Associate Professor)  
Solar Physics and Space Weather, NMSU