

Postdoctoral Fellow

Posting Details

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Posting Summary

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Posting Number	RTF00297PO24
USC Market Title	Post Doctoral Fellow
Link to USC Market Title	https://uscjobs.sc.edu/titles/156387
Business Title (Internal Title)	Postdoctoral Fellow
Campus	Columbia
Work County	Richland
College/Division	College of Arts and Sciences
Department	CAS Physics and Astronomy
Advertised Salary Range	Salary commensurate with qualifications
Location of Vacancy	
Part/Full Time	Full Time
Hours per Week	37.5
Work Schedule	Standard working schedule: 8:30am – 5:00pm Must be willing to work a flexible schedule to meet the needs of the department.
Type of Staff Position	Staff Research Grant (SRGP)
Basis	12 months
Job Search Category	Post-doctoral

About USC

About University of South Carolina	From the Upstate to the Lowcountry, the University of South Carolina system is transforming the lives of South Carolinians through the impact of our eight institutions and 20 locations throughout the state. More than 50,000 students are enrolled at one of eight institutions, including the research campus in Columbia and comprehensive four-year universities in Aiken, Upstate and Beaufort. In addition, our Palmetto College campuses in Salkehatchie, Union, Lancaster and Sumter enable students to earn associate or bachelor’s degrees through a combination of in-person, online or blended learning. All of our system institutions place strong emphasis on service — helping to build healthier, more educated communities in South Carolina and beyond.
Inclusive Excellence Statement	At the University of South Carolina, we strive to cultivate an inclusive environment that is open, welcoming, and supportive of individuals of all backgrounds. We recognize diversity in our workforce is essential to providing academic excellence and critical to our sustainability. The University is committed to eliminating barriers created by institutional discrimination through accountability and continuous process improvement. We celebrate the diverse voices, perspectives, and experiences of our employees.

Benefits for Research Grant or Time-Limited Positions Are Indicated Below
The University of South Carolina (UofSC), through the State of SC and Public Employee Benefit Authority (PEBA), offers employees a valuable benefits package, including health and life insurance, generous paid leave and retirement programs. To

learn more about UofSC benefits, access the "Working at USC" section on the Applicant Portal at <https://uscjobs.sc.edu>. Research Grant or Time-limited positions may be eligible for all, some, or no benefits, based on the grant or project funding.

South Carolina Retirement	No
State Insurance Programs	Yes
Annual Leave	Yes
Sick Leave	Yes

Position Description

Advertised Job Summary	Under general supervision of the Principal Investigator (PI), Dr. Enrique Lopez-Rodriguez, the primary work will involve analyzing and developing high-resolution cosmological magnetohydrodynamic simulations, including, but not limited to, dust properties, cosmic rays, and mock infrared and radio observations (i.e., ALMA, JWST, SOFIA, VLA, SKA). The ultimate goal is to characterize the evolution and role of magnetic fields and dust in galaxies and the circumgalactic medium over cosmic time. The successful candidate will be required to maintain accurate and detailed data records, prepare research progress reports, and share findings; develop research projects on extragalactic magnetism, galaxy formation, and evolution using magnetohydrodynamical simulations in combination with observations to support future application; support the development of grant proposals by providing material and/or research narratives to develop new projects; and contribute to the preparation and submission of research grant and observing proposals. The postdoctoral fellow will also assist in supervising graduate and undergraduate students and coordinating efforts with other researchers in the group.
Job Related Minimum Required Education and Experience	Requires a Doctoral (Ph.D.) degree in area of specialty.
Required Certification, Licensure/Other Credentials	
Preferred Qualifications	PhD in astronomy or a closely related field.
Knowledge/Skills/Abilities	Expertise in numerical magnetohydrodynamical simulations, cosmology, and extragalactic astrophysics, which could have been gained during the normal course of a doctoral degree program. Required to conduct business lawfully and ethically by consistently adhering to compliance policies, procedures, and regulations.

Job Duties

Job Duty	Contribute to the Extragalactic Magnetism Group led by Prof. Enrique Lopez Rodriguez. The postdoctoral fellow will participate in analyzing and developing high-resolution cosmological magnetohydrodynamic simulations, including, but not limited to, dust properties, cosmic rays, and mock infrared and radio observations (i.e., ALMA, JWST, SOFIA, VLA, SKA). The ultimate goal is to characterize the evolution and role of magnetic fields and dust in galaxies and the circumgalactic medium over cosmic time.
Essential Function	Yes
Percentage of Time	30
Job Duty	Maintain accurate and detailed data records, prepare research progress reports, and share findings via meetings, conferences, and publications.
Essential Function	Yes
Percentage of Time	10
Job Duty	Assist with supervision of students and coordinate efforts with other researchers in the Extragalactic Magnetism Group at USC.
Essential Function	Yes
Percentage of Time	10

Job Duty Contribute to the preparation and submission of research grant and observing proposals.

Essential Function Yes

Percentage of Time 10

Job Duty Developing research projects on extragalactic magnetism, galaxy formation, and evolution using magnetohydrodynamical simulations in combination with observations to support future applications. Support the development of grant proposals by providing material and/or research narratives to develop new projects.

Essential Function Yes

Percentage of Time 40

Position Attributes

Hazardous weather category Non-Essential

Employees in Safety-Sensitive or Security-Sensitive positions will be subject to pre-employment and post-employment drug testing in accordance with University policy HR 1.95 Drug and Alcohol Testing. No

Posting Detail Information

Number of Vacancies 1

Desired Start Date

Position End Date

Job Open Date 10/17/2024

Job Close Date 11/29/2024

Open Until Filled No

Special Instructions to Applicant Applications must include: (1) a cover letter, (2) a curriculum vitae, (3) a research statement, and (4) the names and email addresses of at least 3 references. Review of applications will begin on November 15, 2024, and continue until the position is filled. Inquiries about this position may be directed to Dr. Enrique Lopez Rodriguez at LOPEZROE@mailbox.sc.edu.

Positions are advertised for a minimum of five (5) business days on our job website. After five (5) business days, positions can be closed at the discretion of the department at any time. This employment site is updated on a regular basis. The length of the recruitment and screening process may vary from position to position, depending upon a variety of factors. Should review of your qualifications result in a decision to pursue your candidacy, you will be contacted by phone or email.

We are only accepting applications submitted by November 29, 2024.

Quicklink for Posting <https://uscjobs.sc.edu/postings/177013>

EEO Statement The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of age, ancestry, citizenship status, color, disability, ethnicity, familial status, gender (including transgender), gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (false pregnancy, termination of pregnancy, childbirth, recovery therefrom or related medical conditions, breastfeeding), race, religion (including religious dress and grooming practices), sex, sexual orientation, veteran status, or any other bases under federal, state, local law, or regulations.

Supplemental Questions

Required fields are indicated with an asterisk (*).

1. * Do you have at least a Doctoral (Ph.D.) degree in area of specialty?
 - Yes
 - No
2. * Do you have expertise in numerical magnetohydrodynamical simulations, galaxy evolution and formation, and extragalactic astrophysics?
 - Yes
 - No

Applicant Documents

Required Documents

1. Cover Letter
2. Curriculum Vitae
3. List of References and Contact Information
4. Research Statement

Optional Documents

1. Other Supporting Documents