

Brown University
Department of Physics
Postdoctoral Research Associate

The Center for the Fundamental Physics of the Universe (CFPU) in the Department of Physics at Brown University will have an opening for a postdoctoral research associate starting July 1, 2023 or earlier if desired. Timing can be negotiated. The position will involve close collaboration with one or more core CFPU faculty members in the field of machine learning for astro-particle physics and/or cosmology. We seek an individual who can complement the existing strengths of the center while bringing cutting edge skills in machine learning to bear on problems of interest to center members.

Details of the research programs and the members of the CFPU are shown at <https://cfpu.brown.edu/>. In summary, the CFPU brings together researchers engaged in experimental and theoretical work aimed at answering some of the major fundamental questions about the physics of the Universe. Core faculty come from various sub-disciplines: four from Astrophysics, Particle Astrophysics, and Cosmology Experimental work (Dell'Antonio, Gaitskell, Pober, and Tucker), three pursuing Astrophysics, Particle Astrophysics, Cosmology Theory, and Phenomenology (Alexander, Fan, and Koushiappas) and two High Energy Particle Physics Experimentalists (Heintz and Landsberg). One of the center's major goals is to identify and develop new cross-disciplinary techniques for future experimental searches to better understand dark matter and dark energy. CFPU research is also conducted with members of the Brown Computer Science Department (Bach and Eickhoff).

Initial offers will be made for one year, with the potential for renewal for a further two years. The successful applicant must have completed the requirements for a Ph.D. or equivalent qualification in physics, astrophysics, computer science, or a related discipline prior to the start of appointment. Experience with machine learning techniques is required; prior experience in relevant physics and/or cosmology will be viewed positively in the evaluation, but is not a requirement. Interested candidates should submit the following application materials:

- Curriculum vitae.
- Statement of research interests. Applicants should try to identify one or more core CFPU faculty members they are interested in collaborating with. The statement of research interests should not exceed 3 pages, excluding bibliography.
- Three letters of recommendation submitted prior to the application deadline.

Applications should be submitted by **December 1, 2022 for full consideration**, although review of applications will continue on a rolling basis until the position is filled. Inquiries should be sent to cfpu_physics_postdoc_search@brown.edu. Submission is made online using Interfolio <http://apply.interfolio.com/115559>. Applicants should state in their cover letter how, through their research approaches, teaching methodology and/or public engagement, they are prepared to advance Brown's strong commitment to diversity, equity, and inclusion.

Brown University seeks to recruit and retain a diverse workforce to maintain the excellence of the University, and to offer our students richly varied disciplines, perspectives, viewpoints, and ways of knowing and learning.

Brown University is committed to fostering a diverse and inclusive academic global community; as an EEO/AA employer, Brown considers applicants for employment without regard to, and does not discriminate on the basis of, gender, sex, sexual orientation, gender identity, national origin, age, race, protected veteran status, disability, or any other legally protected status.