UNIVERSITY OF SUSSEX

Athena SWAN Bronze Award

happy to talk flexible working

Post Title: Postdoctoral Research Fellowship in Cosmology
School/department: School of Mathematics and Physics Sciences
Hours: full time, Requests for flexible working options will be considered (subject to business need).
Contract: fixed term until 31 March 2023
Reference: 3958
Salary: starting at £33,797 to £40,322 per annum, pro rata if part time
Placed on: 08 July 2020
Closing date: 06 August 2020 Applications must be received by midnight of the closing date.
Expected Interview date: To be confirmed
Expected start date: 1 Oct 2020 or later by mutual agreement

We invite applications for a Postdoctoral Research Fellowship in Cosmology at the University of Sussex. We are seeking a talented and creative cosmologist with demonstrably strong contributions to research at doctoral or post-doctoral level. Of particular interest are applicants to work with to work with Antony Lewis in the field of theoretical and numerical cosmology, esp. CMB and CMB lensing, and work related to Simons Observatory and/or S4. However, outstanding applications will be considered in any relevant area of cosmology.

Details of the current research of the cosmology group can be found at http://www.sussex.ac.uk/astronomy/research.

Successful candidates will be expected to assist in the teaching and supervision of students within the group.

A CV, including publication list, and statement of research interests and skills should be included with your application. Candidates should also supply the names and email addresses of 2-3 referees.

Informal enquiries should be addressed to Antony Lewis (antony.lewis@sussex.ac.uk).

The University is committed to equality and valuing diversity, and applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in Science, Technology, Engineering, Medicine and Mathematics (STEMM) at Sussex.

For full details and how to apply see our vacancies page

2. The School / Division

Please find further information regarding the school/division at
http://www.sussex.ac.uk/physics/

3. Job Description

Job Description for the post of: Research Fellow in Cosmology

Department: Physics and Astronomy

Section/Unit/School: Mathematics and Physical Sciences

Location: Pevensey-3

Grade: Research Fellow I, Grade 7

Responsible to: Principal Investigator through to Head of School

Responsible for: Research Fellow I is an early career-grade research position. Post-holders will be expected to contribute to the work of the research team, and also to develop their research skills with support from more experienced members of staff.

4. Person Specification

INDICATIVE PERFORMANCE CRITERIA

- A PhD (or equivalent scholarly or relevant professional activity)
- Being a lead author in published research or demonstrably important role within a large collaboration
- Other forms of externally recognised professional practice of creative output of a standing equivalent to regular publication of original research.

ESSENTIAL CRITERIA

1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below)
2. Evidence of engagement in high-quality research activity or software development.
3. Good presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.
4. Ability to work individually on own initiative and without close supervision, and as part of a small team.
5. Ability to exercise a degree of innovation and creative problem-solving.
6. Excellent organisational and administrative skills.
7. Ability to prioritise and meet deadlines.
8. Excellent IT skills.

ESSENTIAL ROLE-SPECIFIC CRITERIA

1. High level of knowledge and skill in the use of data products and the processing of data from the CMB and large-scale structure and/or
2. High level of expertise in modelling and interpretation CMB lensing and other cosmological probes and/or
3. High level of expertise in theoretical modelling of early-universe cosmology and extended physical models, and calculation of their observable signatures

4. Exceptional demonstrated innovation, skill and knowledge in a relevant area of theoretical or observational cosmology
5. Established publication record in the area cosmology or statistical methods, and/or production of high-quality software

DESIRABLE CRITERIA

1. Emerging track record of high-quality publications in reputable journals and other appropriate media of similar standing.

DESIRABLE ROLE-SPECIFIC CRITERIA

1. Experience with CMB modelling or lensing and lensing reconstruction estimators
2. Experience with data analysis
3. Broad experience in structured high-performance numerical code development, esp. Python
4. Involvement with Simons Observatory/S4 or experience with related CMB experiments