University of Nottingham
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Role profile

Job title	Research Fellow (Title will be Research Associate if an appointment is made before PhD is completed) in Early Universe Cosmology.	Job family and level	Research and Teaching Level 4
School/ Department	School of Physics and Astronomy	Location	University Park Campus

Purpose of role

To carry out research into aspects of early universe cosmology and gravity which can include; inflation, non-perturbative field theory and phase transitions in the early universe.

The researcher will be an integral part of a large and diverse team of researchers from both the Particle Cosmology group in the School of Physics and Astronomy, and the Quantum Gravity group in the School of Mathematical Sciences.

The main responsibility of these posts will be to carry out independent research on physics of early universe cosmology and gravity. The researchers are moreover expected to actively contribute to the research activities of the Particle Cosmology and/or Quantum Gravity groups.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	To plan and conduct primary research towards the goals of the research project.	80 %
2	To write up research work for publication and contribute to the dissemination of research at scientific conferences. To assist in the dissemination of research outputs to the general public.	10 %
3	To identify opportunities and assist in writing bids for research grant applications.	1 %
4	To assist where appropriate with supervising undergraduate and postgraduate students projects as appropriate. To participate in the assessment of student knowledge and co-supervise projects at Masters level.	2 %
5	To build relationships with both internal and external contacts in order to exchange information, to form relationships for future collaborations and identify potential sources of funds and/or opportunities for collaboration.	2 %
6	To develop their own research ideas and collaborate with academic colleagues on areas of shared interest for example, course development, collaborative or joint research projects.	5 %

Person specification

	Essential	Desirable
Skills	▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex and conceptual ideas to non-specialists as well as to peers, using high level skills and a range of media. ▪ Good interpersonal skills. ▪ Ability to build relationships and collaborate with others, internally and externally.	
Knowledge and experience	▪ Physics-based research experience in theoretical physics and/or cosmology. ▪ Proven research track record in a number of the following: inflation, non-perturbative field theory, early universe phase transitions. ▪ A consistent track record of published research in peer reviewed journals. ▪ Sufficient breadth and depth of specialist knowledge in theoretical physics and/or cosmology to develop new research programmes and methodologies.	▪ Previous success in gaining support for externally funded research projects. ▪ Experience of developing new approaches, models, techniques or methods in research area. ▪ Evidence of independence in research.
Qualifications, certification and training (relevant to role)	Bsc/MPhys Degree (or equivalent) in a Physics related subject. PhD (or close to obtaining a PhD) in physics or mathematics related to the subject.	

Athena SWAN Silver Award

The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
Taking ownership	Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
Forward thinking	Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
Professional pride	Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
Always inclusive	Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others