



Job title	Research Associate/Fellow in Ultra Cold Atoms & Quantum Optics	Job family and level	Research & Teaching Level 4 (Appointment will be Level 4 Career Training Grade where an appointment is made before PhD has been completed)
School/ Department	School of Physics and Astronomy	Location	University Park Campus

Purpose of role

The role will cover specific responsibility for experimental research in atomic physics and quantum optics, in particular pursuing research objectives of an EPSRC-funded, international collaboration on developing integrated infrastructure for atomic clock experiments.

As part of a research team, the post holder will be expected to plan and conduct laboratory-based work using appropriate approaches, methodologies and techniques. Further responsibilities include the daily supervision of younger colleagues, reporting, writing of scientific publications, and contribution to the project organisation and development of further opportunities.

The role holder will have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Experimental research <ul style="list-style-type: none"> ▪ Plan, manage and conduct own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others ▪ Analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area ▪ Write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs 	60 %
2	Supervision <ul style="list-style-type: none"> ▪ Provide support, guidance and supervision to other staff, where appropriate in own area of expertise ▪ Supervise undergraduate and/or postgraduate students' projects, fieldwork and placements, as appropriate. To participate in the assessment of student knowledge and co-supervise projects at Masters level 	20 %
3	Project management	10 %

	<ul style="list-style-type: none"> ▪ Co-ordinate the operational aspect of research networks, for example, arranging meetings and updating websites etc. and contribute to collaborative decision making with colleagues in area of research ▪ Utilise and contribute to organising research resources and facilities, laboratories and workshops as appropriate 	
4	<p>Collaboration and further opportunities</p> <ul style="list-style-type: none"> ▪ Collaborate with academic colleagues and/or external partners on joint research projects ▪ Identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes ▪ 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 	10 %

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Excellent communication skills. ▪ High analytical ability to analyse and illuminate data, interprets reports, evaluate and criticise texts and bring new insights. ▪ Ability to creatively apply relevant research approaches, models, techniques and methods. ▪ Ability to assess and organise resource requirements and deploy effectively. ▪ Ability to build relationships and collaborate with others, both internally and externally. 	<ul style="list-style-type: none"> ▪ Ability to foster a research culture and commitment to learn in others.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Robust background in experimental cold atom physics, quantum optics or related experimental areas. ▪ Practical experience in use of research methodologies and techniques to work within area. 	<ul style="list-style-type: none"> ▪ Experience in both experimental and theoretical research. ▪ Experimental background in atomic clocks and/or atom chips. ▪ Involvement in collaborative projects. ▪ Practical knowledge of electronics and software.
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD, or nearing completion, in physics or a related discipline or the equivalent in professional qualifications and experience in research area. 	<ul style="list-style-type: none"> ▪ First degree (MSci/MPhys or equivalent) in Physics or a related discipline or the equivalent in professional qualifications and experience in research area.



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.



The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.

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 friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
- Taking ownership** Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
- Forward thinking** Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
- Professional pride** Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
- Always inclusive** Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

