

Job title	Research Assistant/Associate in GaiaUnlimited
Grade	G5 or G7
Salary range	£26,715 to £30,942 or £32,816 -£40,322
Staff Group	Research
Department / Institution	Institute of Astronomy

Role-specific information

Role Summary

Research Assistant/Associate to work with at the Institute of Astronomy, Cambridge to work on the survey selection function for the Gaia mission. The research will be done as part of the GaiaUnlimited project, funded from the European Unions Horizon 2020 research and innovation programme. The aim is to research, develop, and implement the Gaia survey selection function, as well as selection functions for Gaia combined with other surveys. This will result in publicly available data products and open-source code to apply the selection functions to astronomical analyses of the Gaia data.

The successful candidate will work in Prof Vasily Belokurov's group; frequent interaction with the Cambridge Gaia team is envisaged. The work will be carried out in collaboration with the international partners in GaiaUnlimited, and will be embedded within the Gaia Data Processing and Analysis Consortium.

The successful candidate will be expected to pursue independent and collaborative research, develop a high degree of interaction with the faculty, postdoctoral researchers and research students, and actively contribute to the life of the department. They will disseminate their research findings via publications or other appropriate media, such as international workshops and conferences. They will be encouraged to participate in the teaching and learning programmes of the department as well as in the supervision of postgraduate research students and outreach events.

The purpose of the role is to support and maintain the University's national and international reputation for excellence in teaching and research, working in one of the core research areas of the Institute of Astronomy. Contribution to excellence in research will be at the level of researcher at a similar level to that undertaken by lecturing staff and will provide substantial scope for academic judgement, originality, interpretation and presentation of results. The role holder will assist with grant administration and the writing of reports for funding bodies. Contribution to teaching will include participation in the research group's teaching programme and the supervision of students. The role holder will participate in the overall contribution of the department/faculty as appropriate.

Key Responsibilities

Research and scholarship:	
<ul style="list-style-type: none"> • develop research objectives and proposals for own or joint research; • conduct individual and collaborative research projects; • write up research work for presentation and publication; 	75%

<ul style="list-style-type: none"> continually update knowledge and understanding in field or specialism; translate knowledge of advances in the subject areas into research activity; manage own research and administrative activities, with guidance if required. assist in the preparation of proposals and applications to external bodies, e.g. for funding and contractual purposes; communicate material of a specialist or highly technical nature. 	
Teaching and learning support:	
<ul style="list-style-type: none"> may assist in the supervision of student projects; provide limited supervision/instruction to classes; may assist in the development of student research skills; may plan and deliver seminars relating to research area. 	5%
Liaison and networking:	
<ul style="list-style-type: none"> liaise with colleagues and students; build internal and external contacts and participate in networks for the exchange of information and to form relationships for future collaboration. 	10%
Planning and organising:	
<ul style="list-style-type: none"> plan the use of research resources, laboratories and workshops as appropriate; plan and manage own research activity in collaboration with others; contribute to planning of joint research projects led by principal investigator. 	10%

Person Profile

Education & qualifications	Holds a PhD in astronomy, physics, computer science or mathematics or a related field (or be near to completion).
Specialist knowledge & skills	Specialist knowledge relevant to the scientific field described under 'Role Summary'.
Interpersonal & communication skills	Experience of presenting scientific research. Excellent communication and organisational skills.
Relevant experience	Experience of managing own workload;
Additional requirements	Ability to work flexibly and travel if required

Terms and Conditions

Location	Institute of Astronomy, Madingley Road, Cambridge, CB3 0HA (West Cambridge Site)
Working pattern	Monday to Friday (with flexibility)
Hours of work	Full time
Length of appointment	3 years in the first instance
Limited funding	This post is funded by non-central sources/a research grant or contract and, in the event that this funding should cease, the post may be at risk of redundancy. In the

	first instance, the funding supporting the post ends three years after the date of appointment and the head of department, or his/her nominee, will keep the role holder informed of the funding situation.
Probation period	6 months
Annual leave	Full time employees are entitled to annual paid leave of 41 days inclusive of public holidays. This entitlement is pro rata in the holiday year of commencement of employment and in the year your employment terminates.
Pension eligibility	Universities Superannuation Scheme (USS). Pension scheme details, including information about the legal requirement for the University to automatically enrol its eligible jobholders into a qualifying workplace pension scheme from 1 March 2013, is available at: http://www.pensions.admin.cam.ac.uk/ .
Retirement age	The University does not operate a retirement age for research staff.

Screening Check Requirements

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it. If you need further information, you may find the Right to Work page within the 'Applying for a job' section of the University's Job Opportunities pages helpful (please see <http://www.jobs.cam.ac.uk/right/have/>).

Application Process

To submit an application for this vacancy, please click on the link in the 'Apply online' section of the advert published on the University's Job Opportunities pages. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

Please ensure that you upload your Curriculum Vitae (CV), covering letter, publications list and a statement of research interests in the Upload section of the online application. If you upload any additional documents which have not been requested, we will not be able to consider these as part of your application.

The closing date for applications is 23:59 GMT of **Wednesday, 20th January 2021**. If you have any questions about this vacancy or the application process, please contact Ms Joy McSharry (jpm@ast.cam.ac.uk). Further information can be obtained from Professor Vasily Belokurov (vasily@ast.cam.ac.uk).

The names and contact details of three referees are a necessary part of the submission. Referees will be contacted following an application but applicants are strongly advised to prepare nominated referees for the need to provide references (in response to the online generated request) by **27th January 2021**.

General Information

The University of Cambridge

The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates have won more
HR7 Further Information, Version 11, 09.05.19

Nobel Prizes than any other University.

Our sustained pursuit of academic excellence is built on a long history of first-class teaching and research within a distinctive collegiate system. For eight centuries our ideas and innovations have shaped the world. Our principal goal is to remain one of the world's leading universities in an increasingly competitive global higher education sector. Today the University of Cambridge is at the centre of a cluster of over 4,300 businesses employing 58,000 people.

Our capital investment projects include the West Cambridge site, the North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development includes the opening of a primary school – the first in the UK to be managed by a University. So we are deeply embedded in, and committed to serving, our local community. These are all conspicuous signs of a University that is not only adapting to new needs, but also anticipating the future.

About Us

The University is one of the world's leading academic centres. It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections. The University has an annual income of £2 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £500 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support. The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit students, provide student accommodation and deliver small group teaching. The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching and conducting research.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-Africa Programme involving universities in Ghana, Uganda and elsewhere on the African continent; or the close association with the government of India to pursue new research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

The Institute of Astronomy

The Institute of Astronomy (IoA) represents the largest concentration of research astronomers in the United Kingdom. Situated two kilometres west of the centre of Cambridge, in extensive gardens and woodland, the Institute provides an extremely pleasant working environment. The original Observatory building has been extensively renovated, the Hoyle building has been modernised and extended, while the community has recently been extended and enriched by the addition of new buildings to accommodate the Kavli Institute for Cosmology and the Battcock Centre (Cavendish Astrophysics) on the Institute's site.

The research complement of the Department consists of 18 permanent university teaching staff, approximately 75 post-doctoral researchers, fellows and long-term visitors, and some 45 graduate students. The Institute is characterised by an extremely broad range of research interests; theoretical work spans aspects of cosmology, high-energy astrophysics and exoplanet, stellar, galactic and extragalactic astronomy, and observational work encompassing a similar range of topics is carried out using ground-based (Vista Hemisphere Survey, Local Volume Legacy) and space-borne facilities in the X-ray, ultra-violet, optical and infra-red spectral regions (XMM, Gaia, Planck).

There is an active visitor and conference programme. Several seminars per week are held during term time. In most years, one, and often two, international conferences are held, embracing a wide range of subject areas.

The IoA hosts the Cambridge Astronomical Survey Unit, which is a leading participant in data reduction and analysis for survey astronomy, including development of the Astrophysical Virtual Observatory, and its application to major ground and space projects.

Additional information is available on the web site at <http://www.ast.cam.ac.uk>.

Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 18,000 students and over 16,000 staff from all walks of life and corners of the world. The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels.

We offer a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment. The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a new science and technology campus to the west of the city centre, and is now expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with our continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and we continue to redevelop our historic city centre sites demonstrating our determination to ensure that we can offer the best facilities and opportunities for our staff and students.

Equality and Diversity

The University has built its excellence on the diversity of its staff and student community. We aim to be a leader in fostering equality and inclusion, and in promoting respect and a sense of belonging for all. We encourage applications from all sections of society. All appointments are made on the basis of merit. We have an Equal Opportunities Policy, along with a range of diversity networks for women, black and minority ethnic and lesbian, gay, bisexual and transgender staff. More details are available here: <http://www.equality.admin.cam.ac.uk/>

The University has a bronze Race Equality Charter aware, with framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's Athena SWAN award recognises and celebrates good practice in recruiting, retaining and promoting women.

Living in Cambridge

From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.

You can find a wide-range of high street shops and 3 shopping centres, with independent alternatives at the historic market and nestled within the passageways in the city centre. You will find a cinema, bowling alley, a nightclub and various live performances At the Cambridge Leisure Park, with further entertainment options at the Corn Exchange, Arts Theatre and the ADC Theatre. Further information can be found on the [Visit Cambridge](#) website.

If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes. Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

Relocation Support

The University recognises the importance of helping individuals to move and settle into a new area. We provide support and guidance to those relocating internationally or domestically to take up a post at the University of Cambridge, liaising with other University offices and selected partners to ensure comprehensive relocation support is available. This includes: accommodation, childcare, schools, banking, immigration and transport. If you would like further information, please visit <https://www.accommodation.cam.ac.uk/>. The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of staff with the costs of relocating to Cambridge.

Accommodation Service

The University Accommodation Service helps staff, students and visiting scholars who are affiliated to the University in their search for suitable accommodation in Cambridge. The dedicated accommodation team can provide access to a wide range of University-owned furnished and unfurnished properties, and has a database of private sector accommodation available for short and long-term lets. For further information and to register with this free service please visit <https://www.accommodation.cam.ac.uk/>

What Cambridge can offer

We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work.

The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a [career break scheme for academic and academic-related staff](#), with additional flexible working policies for all other staff.

Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings. Payroll giving is also a simple, tax-efficient way for employees to make monthly donations to charity.

CAMbens employee benefits

We offer a CAMbens scheme for University employees, providing access to online and in-store shopping discounts and cashback. With more than 2,000 participating retailers, employees can save money on a wide range of household expenses, from groceries and clothes, to holidays and insurance and much more. A range of local discounts are also available, helping employees to save money whilst also supporting local Cambridge businesses and a CAMbens Cycle to Work salary sacrifice scheme is also available, which enables employees to save money on

transport costs. A 10% discount rate on the [purchase of train season tickets, bulk buy tickets](#) and an interest free travel to work loan are also available for staff of the University.

Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 18 weeks full pay and emergency family care support via My Family Care. Other family-friendly support includes: Our highly regarded workplace nurseries, a childcare salary exchange scheme and a high-quality holiday Playscheme may be available to help support University employees with caring responsibilities (subject to demand and qualifying criteria). Further childcare information can be found here: <https://www.childcare.admin.cam.ac.uk/>

The [Newcomers and Visiting Scholars Group](#) is an organisation within the University run by volunteers whose aim is to help newly arrived wives, husbands, partners and families of Visiting Scholars and members of the University to settle in Cambridge and give them an opportunity to meet local people. The Office of Postdoctoral Affairs supports the postdoctoral community within Cambridge. Further details are available here: <https://www.opda.cam.ac.uk/>

Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. There are many societies in Cambridge catering for almost every taste and interest. Whether you want to take part in a sport, participate in music or drama, pursue a hobby, or join a political group, you will almost certainly find that a society exists for this purpose. The University also hosts the [Cambridge Science Festival](#) and [Cambridge Festival of Ideas](#), as well as [Open Cambridge](#) weekend, which together attract over 50,000 visitors per year. The festivals are a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

Development opportunities

We support new employees to settle in through various activities. The encouragement of career development for all staff is one of the University's values and we put this into practice through various services and initiatives. Our Personal and Professional Development Department provides development opportunities and courses for all University employees. These include face-to-face sessions, online learning modules and webinars. Employees may also apply for financial support to undertake training that will lead to a qualification. We offer reduced staff fees for University of Cambridge graduate courses and the opportunity to attend lectures and seminars held by University departments and institutions. The CareerStart@Cam programme also supports employees in assistant staff roles who do not hold higher education qualifications to develop their skills, experience and qualifications.

Information if you have a Disability

The University welcomes applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment. Information for disabled applicants is available at <http://www.admin.cam.ac.uk/offices/hr/staff/disabled/>