



MATHEMATICAL INSTITUTE
ANDREW WILES BUILDING

Job Description and Selection Criteria

Job title	Systems Administrator
Division	Mathematical, Physical and Life Sciences
Department	Mathematical Institute
Location	Andrew Wiles Building, Radcliffe Observatory Quarter, Woodstock Road, Oxford, OX2 6GG. The department are open to a hybrid working arrangement at typically two days per week from home.
Grade and salary	Grade 7: £36,024 - £44,263 per annum with discretionary range to £48,350 per annum (with the option to fill the post at Grade 6: £32,332 - £38,205 per annum with adjusted duties)
Hours	Full time
Contract type	Permanent
Reporting to	Head of IT (currently Dr Waldemar Schlackow)
Vacancy reference	171215
Additional information	<p>This is a full-time position that cannot be held concurrently with any other substantive post without the explicit permission of the Head of Department.</p> <p>This post is subject to a 12-month probationary period.</p> <p>Whilst this role is a Grade 7 position, we would be willing to consider less experienced candidates who might be suitable to the role with adjusted duties to then be filled at grade 6. This would be discussed with applicants at interview/appointment where appropriate.</p> <p>Please ensure that as well as a CV you upload a supporting statement as applications will be judged against the essential and desirable criteria and the application should thus directly address each point to show how their experience and skills meet the criteria. Examples of relevant experience and skills may have been gained through paid employment, voluntary/community work, domestic responsibilities, spare time activities and training.</p>



The role

The Mathematical Institute, located in the stunning Andrew Wiles Building in central Oxford, is the hub for mathematics teaching and research across the University. Many of the department's members are involved in challenging and innovative projects, which increasingly require specialist IT systems and technical support. The IT Team collectively manage 1500+ devices and systems providing facilities and services to 700+ department members and 800+ undergraduate students, as well as numerous visitors and collaborators.

As Systems Administrator, within the IT Team of 7, you will collaborate in the longer-term planning, security and development of these IT systems, using your technical expertise to support the Head of IT with the delivery of several projects, including the following;

- Further improvements to automated desktop and laptop rollouts (Windows, macOS and Linux)
- Rollout of Ubuntu 24.04
- Wider rollout of Windows 11
- Extension of green IT systems, e.g. further integration of Macs
- Wider roll out of IPv6
- Reviewing and improving AV control and configuration management
- Creating AV documentation and automations
- Update of storage service (e.g. to CEPH or MooseFS)

These projects provide a great opportunity to engage in high-level technical challenges, demonstrate initiative and develop your expertise. You will work with a broad range of colleagues within the department, including senior academics, and be able to converse at a level appropriate to the individual's technical competence.

You will also work closely and collaboratively with the other IT Team members to deliver a high level of frontline and remote technical support to individuals. The department's IT systems are large and complex with numerous physical and virtual servers (approximately 90% Linux), 700+ managed machines (80% Linux, 15% Windows and 5% Mac OS), a further 300+ machines provisioned for self-management, and numerous personal devices all connecting via the managed network infrastructure. The IT team has created a unified cross-platform system which is critical to orchestrating and maintaining these systems for efficient working relationships between academic and professional services staff. A key focus of your role will lie in developing knowledge of the interaction between such systems, and of the complex needs of its users, to provide day-to-day user support and occasional one-on-one systems training. This will require significant initiative and problem-solving skills, including the development of new and novel solutions where appropriate.

Responsibilities

The IT staff work together as a team to collectively share delivery and support of the IT systems, particularly in relation to the systems administration, security and support areas and tasks outlined below.

The exact duties will be determined by the successful candidate's level of experience and expertise, including the option of initially under filling the post at grade 6 if appropriate.

User Administration/Support

- Provide frontline support, advice and assistance (remotely via the email help request system or video conference, and face to face) to users during core working hours, as

required. This will include demonstrations of software and systems use and the transferable skills training of graduate students and support staff

- Create and maintain user accounts and IT support web pages
- Explain service levels and IT policies, and ensure they are maintained and enforced as appropriate
- Provide basic support for the use of departmental AV systems
- Provide backup for the IT Technician when they are unavailable or need extra help to roll out desktops, loan out laptops etc

2) System Administration

- Enhance, update, maintain and execute desktop and laptop deployment automations
- Roll out and maintain server hardware as required
- Maintain HPC server system software and hardware
- Liaise with suppliers and hardware manufacturers as required in case of equipment failure
- Collaborate with the other IT team members on system maintenance and longer-term development of the IT systems. This will include the development of systems and procedures for highly efficient packaging and deployment of applications for managed installations and software update systems, and the appropriate documentation of these systems and procedures
- Scripting of repetitive system administration or support tasks to improve efficiency, remove duplication of effort and eliminate common human errors
- Network hardware configuration and troubleshooting
- OS installations and upgrades - testing, development, automation, security hardening, compatibility
- Support and development of AV systems
- Other services: printing, remote access, DHCP, NTP, DNS, LDAP, Active Directory, VPN, autofs, nextcloud, puppet, Gitlab, syslog, rsnapshot, ksplice, Icinga2, etc

3) Security and Monitoring

- Security of services, machines and wireless networks, including investigation of any suspected security breaches
- Firewall - maintenance, development, upgrades
- Antivirus software installation and management
- System patching and monitoring, e.g. Icinga2, arpwatsh, netdisco

4) Other

- Weekly IT team meetings
- Advising the Director of IT & Physical Resources and the Head of IT on systems strategy, policy, services, service levels and equipment purchases, with the latter including liaison with academics
- Assessment and recommendation of new IT services, hardware and software technologies
- Occasional hardware maintenance and repairs

Selection criteria

The responsibilities/duties outlined above reflect the wide range of activities and services the IT team collectively manage. Working as a team, there is flexibility to share and collaborate on tasks and work on different aspects of the systems over time. The selection criteria below reflect this wide range of activities and, as such, candidates are not expected to be able to fully match all aspects of the technical criteria.

Your application will be judged only against the criteria which are set out below. You should ensure that your application shows clearly how your skills and experience meet these criteria.

The Selection Committee for this process is expected to comprise;

- Dr Waldemar Schlackow
- Dr Keith Gillow
- Naomi Kraker

The University is committed to fairness, consistency and transparency in selection decisions. Members of the selection committee are aware of the principles of equality of opportunity, fair selection and the risks of bias.

If, for any reason, you have taken a career break, parental leave or have had an atypical career and wish to disclose this in your application, the selection committee will take this into account, recognising that the quantity of your experience may be reduced as a result.

Essential

Technical

- Experience of systems administration and/or systems programming/development;
- Experience with automated desktop/laptop deployments;
- Experience modifying, maintaining, and writing scripts, (e.g. Bash, Python, Perl).

Competencies

- University degree and/or relevant experience;
- Excellent organisational skills, including a proven ability to prioritise workload and juggle competing demands;
- Excellent communication skills, in particular the ability to converse at an appropriate technical level with a wide variety of users including senior academics;
- Accuracy and a high level of attention to detail;
- Ability to work independently, but also collaboratively with junior and senior colleagues in the IT Team;
- Initiative, drive, and self-motivation, including a willingness to learn new skills where required;
- Systematic and methodical approach to complex problem solving;
- Proven commitment to service ethos, including experience of providing a high level of customer service to users within core working hours.

Desirable

The department would be particularly interested in applications where the candidate is able to demonstrate experience with some of the following;

- Documenting technical and administrative procedures;
- Ticketing systems and wikis to manage effective shared support and technical documentation;
- Automated installation systems, e.g. Installer answer files; Experience with configuration management systems, e.g. puppet, AD group policy
- Installing and maintaining Open Source software;
- Software package automated installs, e.g. Linux deb, rpm or snap, Windows msi, Mac pkg;
- Mac and Windows system administration and integration;
- Mathematical software and TeX/LaTeX;
- IT support in an academic environment.

If you wish to speak to someone informally about this post, please contact Dr Waldemar Schlackow (Head of IT) [waldemar.schlackow@maths.ox.ac.uk] or Dr Keith Gillow (Director of IT and Physical Resources) [keith.gillow@maths.ox.ac.uk]. Further information about the department is available at: <http://www.maths.ox.ac.uk/>. In particular, IT information is available at: <http://www.maths.ox.ac.uk/members/it>.

What we can offer you:

- Flexible working hours;
- Remote working for typically 2 days a week;
- The package includes generous holiday, defined-benefits pension and associated benefits;
- Departmental Employee Assistance Programme, alongside dedicated support both within the Department and wider University for your personal and career development.

Pre-employment screening

Standard checks

If you are offered the post, the offer will be subject to standard pre-employment checks. You will be asked to provide: proof of your right-to-work in the UK; proof of your identity; and (if we haven't done so already) we will contact the referees you have nominated. You will also be asked to complete a health declaration so that you can tell us about any health conditions or disabilities for which you may need us to make appropriate adjustments.

Please read the candidate notes on the University's pre-employment screening procedures at: <https://www.jobs.ox.ac.uk/pre-employment-checks>

About the University of Oxford

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities and we rank first in the UK for university spin-outs, and in recent years we have spun out 15-20 new companies every year. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information, please visit www.ox.ac.uk/about/organisation.

The Mathematical Institute

The Mathematical Institute, as Oxford's Department of Mathematics is known, is one of the leading mathematics departments in the world. Our mathematical research, impact and environment have twice been ranked first in the UK, in the 2021 and 2014 Research Excellence Framework exercises, a government review of research in all UK universities. The Mathematical Institute is the focus of research into both fundamental mathematics and its applications, and our inclusive nature and overall size are key factors in the provision of an outstanding research environment for our members. The large number of faculty, postdocs and students in the Mathematical Institute, all supported by excellent facilities, allows us to maintain a critical mass in research groups encompassing a wide spectrum of mathematics, while our integrated nature fosters collaboration between fields. We also host a large number of academic visitors. Our web pages (www.maths.ox.ac.uk) provide comprehensive information about all of our activities.

The research activities of the Institute as a whole can be gauged from the web pages of the research groups and centres within the Institute (www.maths.ox.ac.uk/research). The range of our research interests is well reflected by the profile of our faculty as listed at www.maths.ox.ac.uk/people. Many members of the Institute have received prestigious prizes and other special recognition for their work; some recent examples can be found at www.maths.ox.ac.uk/news.

The Mathematical Institute moved into the purpose-built Andrew Wiles Building in the University's Radcliffe Observatory Quarter in September 2013. As well as providing offices for all staff and graduate students, it houses a range of other facilities available to members of the department, including the Whitehead Library, a large range of meeting rooms, teaching spaces, lecture rooms, and social spaces, and a small laboratory for carrying out table-top experiments. For more information, see www.maths.ox.ac.uk/about-us.

Teaching is central to the life of the Mathematical Institute and we have around 900 undergraduates on course, some on joint courses with other departments. We teach around 250 students each year across five taught master's degree courses, and have over 250 doctoral students in residence at any one time. Our doctoral programme always attracts the

best research students from across the world, and we have a broad mentoring and training programme.

The Mathematical Institute strives to ensure that all staff and students are given the opportunities and support they need to achieve their potential. We are committed to equality of opportunities and to advancing women's careers. We support staff returning from long-term absence with teaching relief, offer flexible working arrangements, and the department sponsors University nursery places to support the priority allocation of childcare to our staff. Further information about family support can be found below under University Benefits, Terms and Conditions. Our [Equality, Diversity & Inclusion Committee](#)¹ contributes to many aspects of our work.

As part of the department's commitment to openness, inclusivity and transparency, we strongly encourage applications from all who consider they meet the requirements of the post, and particularly from women and ethnic minorities.

We have a number of family-friendly policies, such as the right to apply for flexible working, hybrid working, and support for staff returning from periods of extended absence. We are committed to ensuring an inclusive interview process and will reimburse up to £250 towards any additional care costs (for a dependent child or adult) incurred as a result of attending an interview for this position, which may not be applicable if the interviews are held remotely.

For more information on the Mathematical Institute, please visit: www.maths.ox.ac.uk

The Mathematical Institute holds a silver Athena Swan award to recognise advancement of gender equality: representation, progression and success for all.

The Mathematical, Physical and Life Sciences Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University. Oxford is widely recognised as one of the world's leading science universities and the MPLS Division is home to our non-medical sciences, with 10 academic departments that span the full spectrum of the mathematical, computational, physical, engineering and life sciences, and undertake both fundamental research and cutting-edge applied work. Our research tackles major societal and technological challenges – whether developing new energy solutions or improved cancer treatments, understanding climate change processes, or helping to preserve biodiversity, and is increasingly focused on key interdisciplinary issues. We collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, and with other universities, research organisations and industrial partners across the globe in pursuit of innovative research geared to address critical and fundamental scientific questions.

The disciplines within the MPLS Division regularly appear at the highest levels in rankings, including the Times Higher Education and QS world rankings. Nationally, the quality of the Division's research outputs and environment, and the resulting impact, was recognised through strong performances in the UK Research Excellence Framework in both 2014 and 2021.

MPLS is proud to be the home of some of the most creative and innovative scientific thinkers and leaders working in academe. Our senior researchers have been awarded some of the most significant scientific honours and we have a strong tradition of attracting and nurturing the very best early career researchers who regularly secure prestigious fellowships and faculty

¹ The Mathematical Institute was a founding supporter of the London Mathematical Society's Good Practice Scheme (www.lms.ac.uk/women/good-practice-scheme). We have held an Athena SWAN Silver Award since 2016.

positions. MPLS continues in its work to support diversity in its staffing, seeing that it will bring benefits to all, and we are pleased to note that all academic departments in the Division hold Athena Swan Awards.

We have around 7,300 full and part-time students (including approximately 3,400 graduate students) and play a major role in training the next generation of leading scientists. Oxford's international reputation for excellence in teaching is reflected in its position at the top of the major league tables and subject assessments. MPLS academics educate students of high academic merit and potential from all over the world. Through a mixture of lectures, practical work and the distinctive college tutorial system, students develop their ability to solve diverse mathematical, scientific and engineering problems.

MPLS is dedicated to bringing the wonder and potential of science to the attention of audiences far beyond the world of academia. We have a strong commitment to supporting public engagement in science through initiatives including the Oxford Sparks portal (www.oxfordsparks.ox.ac.uk) and a large variety of outreach activities; these are crucial activities given so many societal and technological issues demand an understanding of the science that underpins them. We also bring the potential of our scientific efforts forward for practical and beneficial application to the real world and our desire, aided by the work of Oxford University Innovation and Oxford Sciences Innovation, is to link our best scientific minds with industry and public policy makers.

For more information about the MPLS division, please visit: www.mpls.ox.ac.uk

How to Apply

Applications are made through our online recruitment portal. Information about how to apply is available on our Jobs website <https://www.jobs.ox.ac.uk/how-to-apply>.

Your application will be judged solely on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

As part of your application you will be asked to provide details of two referees and indicate whether we can contact them now.

You will be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants).

All applications must be received by **12.00 noon** UK time on **Monday 08 April**.

Interviews are anticipated to take place in the week commencing **29 April**.

Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing department(s).

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments).

DATA PROTECTION: All data supplied by applicants will be used only for the purposes of determining their suitability for the post, and will be held in accordance with the principles of the Data Protection Act 1998 and the department's data protection policy.

<https://www.maths.ox.ac.uk/members/policies/data-protection/statement>

Due to the large volume of recruitment that the department administers we are unable to provide feedback to non-shortlisted applicants.

If you need help

Application FAQs, including technical troubleshooting advice is available at: <https://staff.web.ox.ac.uk/recruitment-support-faqs>

Non-technical questions about this job should be addressed to the recruiting department directly at vacancies@maths.ox.ac.uk.

To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will receive an automated email from our online recruitment portal to confirm receipt of your application. **Please check your spam/junk mail** if you do not receive this email.

Important information for candidates

Data Privacy

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at: <https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy>. The University's Policy on Data Protection is available at: <https://compliance.admin.ox.ac.uk/data-protection-policy>.

The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for very senior research posts at **grade RSIV/D35 and clinical equivalents E62 and E82**, which with effect from 1 October 2023 will be 30 September before the 70th birthday. The justification for this is explained at: <https://hr.admin.ox.ac.uk/the-ejra>.

For **existing** employees on these grades, any employment beyond the retirement age is subject to approval through the procedures: <https://hr.admin.ox.ac.uk/the-ejra>.

There is no normal or fixed age at which staff in posts at other grades have to retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

Equality of opportunity

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against

because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

Benefits of working at the University

Employee benefits

University employees enjoy 38 days' paid holiday, generous pension schemes, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and University colleges, and discounts at University museums. See <https://hr.admin.ox.ac.uk/staff-benefits>

University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club offers social, sporting, and hospitality facilities. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See www.club.ox.ac.uk and <https://www.sport.ox.ac.uk/>.

Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service website includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See <https://welcome.ox.ac.uk/>. There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependents. See <https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme>

Family-friendly benefits

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See <https://hr.admin.ox.ac.uk/my-family-care>

The University has excellent childcare services, including five University nurseries as well as University-supported places at many other private nurseries.

For full details, including how to apply and the costs, see <https://childcare.admin.ox.ac.uk/>

Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see <https://edu.admin.ox.ac.uk/disability-support>

Staff networks

The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at <https://edu.admin.ox.ac.uk/networks>

The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation run by volunteers that aims to assist the partners of new staff settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See www.newcomers.ox.ac.uk.