Graduate Research Student Handbook

Mathematical Institute

2021

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Welcome

Welcome to, or welcome back to, the Mathematical Institute and the University of Oxford!

The purpose of this handbook is to provide you with information about the way the department operates, key stages in progressing towards your DPhil. degree, financial matters and pastoral care. If there are any questions you still have please ask someone. The two Directors' of Graduate Studies, the Graduate Studies Administrator, and I are here to help you as research students. But anyone in the department - other research students, postdocs and members of staff - will be happy to answer questions about the department and university.

I hope that your time as a research student in the Mathematical Institute will be enjoyable and mathematically fruitful.

Professor Mike Giles Head of Department

1 Sources of Information

This handbook is designed as a guide for graduate research students in the Mathematical Institute. It does not replace the official regulations relating to your degree, which you will find in the *Examination Regulations* here:

 $\label{eq:https://exam:egs.admin.ox.ac.uk/Regulation?code=rdinmathscie&srchYear=2021\&srchTerm=1\&year=2021\&term=1,$

but it is a less formal and more easily understood guide to being a research student in the Mathematical Institute. It also contains general information about the Department, people, facilities and safety. If there is a conflict between information in this handbook and the Examination Regulations then you should follow the Examination Regulations. If you have any concerns please contact graduate.studies@maths.ox.ac.uk.

There is an edition of this handbook on the Mathematical Institute's website at:

https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/handbooks

In addition to this handbook there are some important sources of information that you should make sure you are familiar with.

1.1 The Examination Regulations

As mentioned above the *Examination Regulations* is the authoritative document on the regulations for the University degrees and examinations. The *Examination Regulations* defines the rules for admission to and progression through the programmes of study and the syllabus for examinations. The regulations are available on-line at:

http://www.admin.ox.ac.uk/examregs/information/contents/.

1.2 The Proctors' and Assessor's Memorandum

The University has two Proctors, the **Senior Proctor** and the **Junior Proctor**, who are responsible for making sure that the University operates according to its statutes. The Proctors' Office (http://www.admin.ox.ac.uk/proctors/) is an impartial and discrete part of the University which has oversight of a number of procedures related to students. As well as being members of key decision-making committees, they deal with:

- University (as distinct from college) student discipline;
- complaints about University matters;
- the running of University examinations.

They also carry out ceremonial duties, e.g. at degree ceremonies. The **Assessor** is the third senior officer, responsible particularly for student welfare and finance.

1.3 Statements of Provision for research students

These detail the provisions that have been made for you by the University and the Colleges. The statement that is applicable to you is written by the Mathematical Institute and can be found at:

https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/important-links

1.4 The Mathematical, Physical and Life Sciences Division Graduate Handbook

The division also have a graduate website that includes information for graduate research students, and which you should make sure you are familiar with. This can be found at:

https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students.

1.5 University Gazette and Oxford Blueprint

The Gazette is published weekly in term time, and is the official publication for University business, regulation changes, meetings etc. It is available in all the University and College Libraries and in the Common Room. Oxford Blueprint, a newsletter for University and college staff and students, is published in 0th, 3rd, 6th and 9th weeks of term. It contains news, interviews and features reflecting the diversity of activity across the University, and an events diary is included.

2 Useful Contacts

Please note that during the pandemic all contacts can also be contacted via MS Teams.

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Disability Coordinator		
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Disability Lead		
Peter Howell	80607	peter.howell@maths.ox.ac.uk

2.1 Heads of Research Groups in Mathematics 2021-2022

Algebra: tbc Combinatorics: Professor Alex Scott Data Science: Professor Jared Tanner Geometry: tbc Logic: tbc Mathematical Biology: Professor Philip Maini Mathematical and Computational Finance: Professor Rama Cont Mathematical Physics: Professor Fernando Alday Number Theory: tbc Numerical Analysis: Professor Nick Trefethen Oxford Centre for Industrial and Applied Mathematics: Professor Alain Goriely Stochastic Analysis: Professor Terry Lyons Topology: Professor Ulrike Tillmann

3 Finding Your Way Around

Your academic life in Oxford will involve two intimately connected but distinct institutions. You are a member both of a College and of the University; your supervisor is a member of the Mathematical Institute and possibly a member of a different college. Your college will also allocate a college advisor to you.

In principle, the University exists to enable you to study for a research degree, to monitor your progress, to examine you at the end of that study, and to award you a degree. Your College exists to support and advise you.

3.1 The Mathematical Institute

An entry card system controls access to the building. Your University card, which you collect from your college at the beginning of term, will gain you access to the building, and will operate internal doors where they have security control. Instructions on how to activate your card will be made available to you at the Graduate Induction. If your card fails to allow you access, please contact door-entry@maths.ox.ac.uk giving your name, card number and expiry date.

Rules governing access to the Mathematical Institute are as follows:

- 1. Cards are issued on a personal basis and must not be loaned or passed on to another person.
- 2. No-one should allow access to another person.
- 3. When a card is used to gain access to the building, the system keeps a record of that use for a period of approximately six months.

The Mathematical Institute houses lecture theatres and class rooms in which most of the university lectures in Mathematics take place. There are also a number of offices, most of which are occupied by academic staff, support staff and research students.

Opening Hours The Andrew Wiles Building is open from 8am to 6pm Monday to Friday, except closed periods such as Bank Holidays out of term time. Reception is manned from 8am to 5.30pm. Outside these hours, access to the building is by University card and a personal pin code. Instructions on how to set your personal pin code will be made available to you at the Graduate Induction or can be found via the following link

https://www.maths.ox.ac.uk/members/building-information/opening-hours-access-control.

Social areas The department has a Common Room which is located on the first floor. There are tea/coffee making facilities on all floors. A cafeteria serving food and drinks can be found in the mezzanine.

Smoking Smoking is not permitted anywhere in the Andrew Wiles Building. Smoking on the Radcliffe Infirmary site is permitted in designated smoking areas only.

3.2 University Club

The University Club provides a social and recreational venue intended to serve the University's academics, postdocs, staff, postgraduates, alumni and those who have retired from academic or staff positions. To apply to become a member of the University Club, please visit the website http://www.club.ox.ac.uk and fill in the online membership application form (accessible via the 'Membership' link). Applications may take two weeks to process. Once your application has been processed, your University card will admit you to the club.

4 Terminology

4.1 University terms

The three University 'full' terms are:

Michaelmas (10 October – 04 December 2021) Hilary (16 January – 12 March 2022) Trinity (24 April – 18 June 2022)

Key dates

Friday 0th Week Michaelmas 2021 (8 October 2021) Friday 0th Week Hilary Term 2022 (14 January 2022) Friday 0th Week Trinity Term 2022 (22 April 2022 Friday 0th Week Michaelmas Term 2022 (7 October 2022)

Each term lasts eight weeks, but terms simply set the periods during which formal instruction is given by way of lectures, seminars and tutorials. The University functions throughout the year and as a research student you will need to work in vacation as well as in term time.

4.2 University terminology

Matriculation Matriculation is the formal University admission procedure and is organised by your college.

Sub fusc The University Examination Regulations state that all members of the University are required to wear academic dress with *sub fusc* clothing when attending formal University events such as matriculation and University examinations. Details of what subfusc consists of can be found via the following link: https://www.ox.ac.uk/students/academic/dress.

4.3 Graduate terminology

The following are some of the terms that are particular to graduate research students.

PRS (Probationary Research Student) The status given to students when they are admitted to study for a research degree, usually held for the first year and no longer than six terms.

Transfer of Status An examination that allows the student to progress from PRS to either DPhil or MSc by Research status.

Confirmation of Status An examination, which usually takes place after three years, that allows a DPhil student to progress to the submission of the DPhil thesis.

Graduate Supervision Reporting (GSR) An online system for compulsory termly reporting by graduate students and their supervisors on the progress of the research degree:

http://www.admin.ox.ac.uk/studentsystems/GSR

Graduate Studies Office (GSO) An administrative centre for graduate studies, which manages the process for monitoring student progress, application for suspension and final examination. These applications are made on GSO forms which are available from:

http://www.ox.ac.uk/students/academic/guidance/graduate/progression

DGS (Director of Graduate Studies) The Director of Graduate Studies (Research) and the Director of Graduate Studies (Taught) are responsible for graduate studies and students in the department. They manage the administrative arrangements for supervision, transfer/confirmation of status, extensions of time, and thesis, including appointment of examiners. The Director of Graduate Studies (Taught) is responsible for all probationary research students up to application for Transfer of Status. The Director of Graduate Studies (Research) is responsible for all DPhil students from application for Transfer of Status to completion of studies. In the Mathematical Institute the DGS(R) is Professor Peter Howell and the DGS(T) is Professor Marc Lackenby, and they are assisted by the Graduate Studies Administrator, Sandy Patel and the Graduate Studies Assistant, Paola Quevedo.

5 Studying for a Research Degree

You have chosen to study for a research degree, either DPhil, CDT or MSc by Research. You may have just completed an undergraduate degree, or perhaps a taught Masters course. If so, your study has so far been organised for you — the courses were designed, lectures given, textbooks selected and examinations set. A research degree is very different, in that you will have the responsibility for managing your learning, including determining a problem to study and carrying out the work.

Your *supervisor*, or in some cases joint supervisors, will guide you in your research. Further support will be available from your *college advisor*. We also encourage all students to find a *mentor* (see further details below).

5.1 The nature of research

Some students arrive in Oxford knowing precisely what their research topic will be: others have little more than an idea of its general area. Someone once described research as 'Finding out something to find out, then finding it out'; the first part is often harder than the second. Consequently some students focus rapidly on their thesis work whilst others spend much of the first year before beginning to do so. However, it is important for all research students — even those who know precisely what their field of research is going to be — to acquaint themselves with as much as possible of the work going on in the Mathematical Institute. It is vital for life-after-graduation that you be able to relate different areas and views. There are many points in common between research fields and many useful ideas can be borrowed from fields other than your own. The Mathematical Institutes's seminar series and advanced courses are held partly for this purpose.

Research is not easy! Sometimes long periods can pass without any progress seeming to take place; at other times everything seems to happen at once. You should not be too down-hearted if the going appears to be hard at times — most of the lecturers and research staff have had a similar experience so there is always someone sympathetic to talk to. But you need to be proactive in seeking help, from staff and peers.

5.2 Roles and expectations

Supervisor When you arrive in Oxford, you will already know the name of the supervisor provisionally allocated to you. It is up to you to make contact soon after you arrive. As your first year progresses, if either you or your supervisor is unhappy with the arrangement, changes can be made. It may become clear that your interests are converging on a research topic which can be supervised more appropriately by another member of staff, in which case your supervisor could be changed. In some cases joint supervision is arranged.

The close working relationship with your supervisor is likely to be the most important element during your research life in the department, and much of the first year will be spent on arriving at a good working relationship. The nature of this relationship will depend to a large extent on individual work patterns. It is important that all graduate students are aware of their own responsibilities as research students, but also those of their supervisor. Information on the responsibilities of students and supervisors can be found in the University's Policy on Research degrees https://academic.admin.ox.ac.uk/research-degrees.

In spite of the range of styles of interaction between supervisor and research student, it is important that you meet on a regular basis. We advise that you should meet with your supervisor *at least* 4 times per term. A more typical pattern is *weekly*, at least until you reach the stage of writing up your thesis.

Timing of holidays The MPLS Division has set the DPhil holiday entitlement at 30 personal days a year in addition to Bank Holidays. Where Bank Holidays are worked time can be taken in lieu. Timing of holidays should be explicitly discussed by the student and supervisor, taking into consideration both the requirements of the research and the well-being of the student. The expectations and requirements of different cultures and religions should also be taken in to consideration when discussing holidays. Students should early on consider how these needs may impact on the needs of their research and consult their supervisors on how to structure work within set deadlines.

Buddying Each incoming graduate student is assigned a buddy: a current Maths graduate student. The role of the buddy is to contact the new student before they start, to welcome them to Oxford, and to help them to settle in to the new life as an Oxford Mathematics graduate student. You will have an opportunity to return the favour by becoming a buddy in the future!

Mentoring We encourage each research student to find a mentor. A mentor may be a postdoc, member of faculty, retired member of faculty, or even a more senior graduate student. The aim of the mentoring relationship is to support you in developing skills and knowledge which will enhance your career and/or personal growth. It is suggested that you should find a mentor during Hilary or Trinity Term of your first year. It may work well when your mentor is in the same sort of field as you, but they don't have to be working on the same thing and they don't need to be able to give you detailed advice about your work. Your supervisor can give you advice on whom to approach. There is also a member of faculty in each Research Group who has particular responsibility for graduate students, and who can help you to find a mentor.

Once you have found someone who agrees to be your mentor, they will keep an eye out for you; for example you might have an occasional chat with your mentor at tea after seminars. It can be extremely valuable for you to have someone you can chat to about how things are going and who can provide another perspective. Further information will be circulated by email, so please watch out for this. See https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/mentoring for further guidance.

College Advisor Your *college advisor* is a member of your college who has been assigned to you to provide an additional source of support.

If something goes wrong If you have any issues with teaching or supervision please raise these as soon as possible so that they can be addressed promptly. Details of who to contact are provided in Section 15.1 Complaints and Appeals. If you do not wish to make a complaint but would like to discuss a concern then you should contact the Director of Graduate Studies or the Graduate Studies Administrator.

5.3 Graduate activities

This section lists the main types of activities that every graduate research student should strive to engage in throughout the duration of their studies.

5.3.1 The lecture list

The Mathematical Institute publishes a lecture list for Mathematical Sciences just before the beginning of each term, as do all other Departments of the University. The Mathematics list can be found at http://www/members/students/lecture-lists.

Lecture lists for other Departments in the MPLS Division can be found at https://www.mpls .ox.ac.uk/training/courses. All members of the University may attend any publicly announced University lectures or seminars.

5.3.2 Seminars

Research seminars run weekly within the Mathematical Institute during term time. They are listed on the lecture list as well as the electronic timetable in the foyer of the Andrew Wiles Building. Seminars which are appropriate to your interests should be identified by discussion with your supervisor. A list of all forthcoming departmental seminars and events can be found at https://www.maths.ox.ac.uk/events/list.

6 Skills, Careers and Broadening Training

6.1 Skills training and career development

Developing research, subject specific, personal and professional expertise is crucial to the success of your future career. The skills and experience that got you to where you are now will not necessarily be sufficient to get you to where you want to go next, and so it is important that you continue to develop both depth and breadth of your expertise. The importance of skills training has been recognised by stakeholders such as the Research Councils and UKRI.

The Department and wider University offer a range of training provision which covers research, academic and transferable career skills. Students are expected to take responsibility for shaping their own training, supported by their supervisor. Details of courses available and further information can be found at https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/skills-training.

6.2 Teaching

Many important skills can be developed through teaching, and each DPhil student is expected to participate in the Training in Teaching Programme to support students in developing these skills. You will be introduced to this programme at your induction session. For further details see https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/skills-training/training-teaching.

All research students are asked to undertake teaching within the department. More specifically students who started between October 2018 and September 2020 are required to teach at least one set of classes before transfer of status and one further set of classes before confirmation of status. Students who started from October 2020 are required to teach at least one set of classes before transfer of status and two further sets of classes before confirmation of status. This will usually take the form of acting as Teaching Assistant for a particular undergraduate course. You should make sure you have your supervisor's permission in advance.

Over the summer vacation all research students will be asked to complete a TA registration form, which will give you the opportunity to list which courses you would prefer to teach. Students will be assigned TA positions based on their preference as far as possible, but due to demand it is not always be possible to assign all students a TA position. If you have not been assigned as a TA and it is necessary that you teach in order to meet the teaching requirement then please do notify the Graduate Studies Administrator.

Many of you will have no previous teaching experience, but to give you some insight into what teaching at Oxford involves a half-day training session on teaching methods is held at the beginning of each academic year. It is expected that all new DPhil students will attend this course. DPhil students are not allowed to help with class teaching and marking unless they have attended the seminar on class teaching.

6.3 Outreach

Students are welcome and encouraged to participate in the outreach events run by the department, which are generally aimed at UK school students. Students can sign up to a mailing list to be informed of events needing helpers and can also participate in the Early Career Academic Outreach Network — a university-wide initiative which provides training for researchers interested in communicating their research to a wider audience. The department also runs a student ambassador scheme, with training sessions held in Michaelmas Term, and The Mathemagicians are a group of undergraduates and researchers who run a range of activities in Oxford and across the UK.

Students interested in giving talks or finding out more may also contact the Schools Liaison Officer to discuss opportunities.

6.4 Broadening

6.4.1 Broadening training

There is a specific requirement to undertake 'broadening' training: courses which are designed to broaden the student's knowledge and understanding of the Mathematical Sciences in particular (see https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philo sophy/skills-training/broadening-training). All students starting in October 2020 must undertake 68 hours of broadening courses during their DPhil studies. These should amount to the equivalent of 3 standard 16-hour lecture courses. Students who started in October 2019 or earlier must undertake 100 hours of broadening. These should amount to the equivalent of 5 standard 16- hour lecture courses. The remainder of the 68 or 100 hours is to be made up via attendance at seminars and colloquia.

Broadening courses may be selected from the following:

- Taught Course Centre courses;
- graduate lectures and advanced classes/courses as listed in the Mathematics lecture list;
- courses specific to any of the Mathematics MSc programmes;
- MMath Part C and Part B courses *provided* that the student has not already taken the course (or an equivalent elsewhere);
- courses offered by other departments, with prior approval from the DGS;
- LMS/EPSRC Summer Schools, Graduate Modelling Camps and similar, with the number of hours of lectures defining the amount of training;
- Other courses with approval from the DGS.

Research students who attend Part B and C courses may not attend the problem classes; they are encouraged to form informal groups to discuss the problem sets, and (when space permits) the Department will facilitate booking of rooms for this purpose.

Courses should be chosen in consultation with your supervisor. For October 2020 starters at least 2 of the 3 courses should be distinct from your research. For students who started in October 2019 or earlier 3 of the 5 courses should be distinct from your research.

If your supervisor agrees, you are also permitted to act as a TA to meet the broadening requirement. As described in Section 6.2, students are expected to teach one set of classes prior to transfer of status and a further two sets prior to confirmation of status, so three sets in total. Students are permitted to combine teaching one set of classes with one broadening course by producing a mini-project for marking at the end of teaching one set of classes. However, any further teaching for broadening should be in addition to acting as a TA to meet the teaching requirement.

Assessment methods will vary from course to course. In general the summative outcome will be pass/fail, and any other feedback will be formative. Students offering a part B or C course normally submit a short mini-project essay (or equivalent if appropriate, for example a documented computer program), along the lines of those for the MSc (MMSC) or the MSc (MCF). The topic should be chosen by the student in consultation with the lecturer and the final write-up, which should be in LAT_{EX} , should normally be between 5 and 10 pages long. Lecturers may also choose to assess through the submission of problem sets, or a presentation/interview. The form of assessment must be agreed directly with the lecturer at the start of a course.

- Mini-projects and problem sets must be handed in to the lecturer, along with a form to record the mark, within 3 weeks of the end of the course.
- Marked mini-projects should be returned to the student, and the completed form returned to the Graduate Studies Administrator, by week 0 of the following term. The broadening form can be found via the following link: https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosop hy/skills-training/broadening-training

The assessors for Transfer or Confirmation of Status may ask students questions (at a fairly general level) about the topics they have covered in their broadening training.

6.4.2 Seminars, workshops and colloquia

All doctoral students should be attending seminars, workshops and colloquia regularly, even if not in their specialist area. Students are required to provide a list of such events attended and are encouraged to submit extended abstracts (one or two pages) of at least four of them.

6.4.3 Fridays@4

Fridays@4 is a popular seminar series for postgraduate students and early career researchers that runs weekly during term time. As well as sessions on useful career development skills (how to give good talks, preparing for interviews, etc.), the seminars provide an opportunity to learn about the breadth of research being carried out in the department and to socialise and network with other students.

6.4.4 Exemptions for previous study

Students who have studied for an undergraduate and postgraduate degree for a combined period of five years previous to starting the DPhil in Mathematics may apply to the DGS to have the broadening requirement reduced. In cases where exemptions are granted students will be exempt from a maximum of 1 of the required 3 courses. For students who started in October 2019 or earlier students may be exempt from up to 2 of the required 5 courses. DTC and CDT students are exempt from the requirements, with the exception of attendance of at least 20 seminars, workshops or colloquia. For further information on how to apply for an exemption contact the Graduate Studies Administrator.

6.5 Research integrity

Research integrity is a commitment to creating an environment that promotes responsible conduct by embracing standards of excellence, trustworthiness and lawfulness. The University expects its students to maintain the highest standards of integrity in their research.

For individual researchers, research integrity entails a commitment to a range of practices including:

- intellectual honesty in proposing, performing and reporting research;
- accuracy in representing contributions to research proposals and reports;
- transparency in handling conflicts of interest or potential conflicts of interest;
- protection of participants in the conduct of research;
- humane care of animals in conduct of research.

There are no universally correct ways to do research. There are, however, standards or practice which apply generally. Researchers should:

- be aware of the legislation, codes of practice and University policies relevant to their field;
- have the necessary skills and training for their field;
- comply with the University and funded policies relating to research data management;
- be aware of the publication rules for journals they want to publish in;
- ask if they feel something isn't quite right;
- not ignore problems;
- be accountable to the University and their peers for the conduct of their research.

All researchers are expected to be committed to ethical principles and professional standards. Not upholding such standards, either intentionally or through lack of knowledge, damages the scientific process and may harm research participants, colleagues, the University and society as a whole.

6.5.1 Policies and resources

All those involved with research at Oxford are expected to read and abide by the University's Code of Practice and Procedure for Academic Integrity in Research: http://www.admin.ox.ac.uk/personnel/cops/researchintegrity/.

Students in the MPLS Division are required to complete the online Research Integrity course at https://www.mpls.ox.ac.uk/training/mpls-training/our-courses/mpls-research-courses/rese arch-integrity-online-courses by the time they apply for Transfer of Status.

The University's Research Integrity website https://researchsupport.admin.ox.ac.uk/govern ance/integrity contains a number of additional resources, including links to information on authorship, conflicts of interest, research data management, health and safety, human participations in research, intellectual property, research involving animals, and research misconduct. Your supervisor will play an important role in helping you to develop skills for good practice in research, and is the first person you should ask if you have queries about any aspect of research integrity. Other sources of support and advice include your Director of Graduate Studies, other academics in your department, and the ethics advisors in University Research Services https://researchsupport.admin.ox.ac.uk/about.

6.5.2 Plagiarism

It is important that all research students familiarise themselves with the University's *Policy* on *Plagiarism* (http://www.ox.ac.uk/students/academic/guidance/skills/plagiarism), which provides students with information on what plagiarism is, why plagiarism matters, why to avoid plagiarism and what to avoid. The policy also includes details on what happens if a student is suspected of plagiarism and matters relating to unintentional plagiarism.

7 Monitoring Progress

This section describes the mechanisms for monitoring progress of research degrees, including the main milestones that you will be expected to reach while studying for DPhil or MSc by Research.

These processes are managed by the Graduate Studies Office, the administrative centre for all graduates at Oxford. The specific office that you will be dealing with is the MPLS Graduate Studies Office, see https://www.mpls.ox.ac.uk/graduate-school. In the Mathematical Institute, the people responsible for daily oversight of these processes are the Directors of Graduate Studies, Professor Peter Howell and Professor Marc Lackenby, assisted by the Graduate Studies Administrator, Sandy Patel.

7.1 Termly reporting

Graduate Students are required to submit a reflective report on their progress each term. This should follow on from a supervision meeting where you have discussed your progress and next steps with your supervisor. Your supervisor is also expected to submit a termly report on your academic progress. Your reflective report should be submitted through the online Graduate Supervision Reporting (GSR) (http://www.admin.ox.ac.uk/studentsystems/GSR). This captures information reported by both student and supervisor(s), with details relevant to each student being available to his or her supervisory team and the Director of Graduate Studies. Your college advisor and University and college graduate studies administrators with designated access will also be able to view the report.

It is recognised that students in different situations will have differing needs and concerns. Your termly report should reflect on the progress made on your research project during the current term. You can choose to focus on those aspects of your research and training that are of greatest importance to you at the present time, and may address some of the following points:

- Review and comment on your academic progress during the current reporting period.
- Measure your progress against the timetable and requirements of your programme of study.
- Identify skills developed and training undertaken or required (via the TNA form).
- List your engagement with the academic community.
- Raise concerns or issues regarding your academic progress to your supervisor.
- Outline your plans for the next term (where applicable).

Submitting a report is mandatory for all MPLS students and, if you do not submit a report either for two subsequent terms, or for two terms out of three (on a rolling basis), this will trigger your being invited to a meeting with the Director of Graduate Studies to discuss your progress.

In the term before you expect to transfer status you should complete a 'Preparing for Transfer of Status' form on GSR as your termly reflective progress report. Similarly the term before you expect to confirm status you are expected to complete a 'Preparing for Confirmation of Status' form again on GSR. The questions on the forms are designed to help you reflect on the criteria your assessors will be considering for your transfer and confirmation examination. Both the forms can be found via the following link:

https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/transfer-and-confirmation-status.

7.2 Flagging concerns

If you have any concerns relating to your academic progress these should be flagged in your termly GSR report. These concerns can range from minor concerns to severe concerns:

- Minor concerns: Satisfactory progress is being made, but minor issues have been identified where further action may be required to keep progress on track.
- **Major concerns:** One or more factors are significantly affecting your progress, and further action is required to keep progress on track.
- Severe concerns: Progress is being seriously affected by one or more factors, and a meeting with the Director of Graduate Studies should be held as soon as possible to discuss further action to get progress back on track.

Please note student concerns should relate directly to academic progress. If you are dissatisfied with any aspects of provision, e.g. your supervisory relationship or your working environment, you should raise these with the Director of Graduate Studies or the Graduate Studies Administrator in the first instance.

Your supervisor should discuss any concerns about your academic progress with you before flagging a concern in GSR.

Further guidance on GSR reporting can be found in the MPLS Graduate School webpages:

https://www.mpls.ox.ac.uk/graduate-school/information-for-postgraduate-research-students/supervision

7.3 Transfer of status

(Centre for Doctoral Training (CDT) students should refer to the individual CDT course handbook)

7.3.1 Preparing to transfer from PRS to DPhil or MSc by Research status

If you have little or no previous experience of research then you must prepare to make what is called a *Category A* application. This means that, in consultation with your supervisor, you must write a dissertation, preferably 25-50 printed A4 pages of IATEX, with ample margins

and a font no smaller than 11pt, which is specifically for the purpose of supporting the application. The dissertation need not be bound but it should be securely fastened.

A dissertation may consist of a short piece of original mathematics, or work that could be included or developed to be part of a doctoral thesis, or a critical review of some part of your subject area. It need not contain original mathematics but it must offer something which is not readily available in the existing literature. Simply interlacing sections of existing texts and papers is not enough.

If you have already had experience of mathematical research (for example if you have studied for a Master's degree) and think you already satisfy these criteria, then you must decide whether to make what is called in the regulations a *Category B* application.

For category B applications the written work may consist of one of the following:

- a thesis or dissertation produced in connection with another course of research or study;
- work that has been accepted for publication in a learned journal; or
- other work which is in the opinion of your supervisor of comparable standing.

If at the start of your study you consider that you have work such as this and have also carried out sufficient course work and study to prepare yourself for research, then your supervisor should be consulted immediately. If, in the light of your supervisor's opinion you then decide to make a Category B application, you should proceed to do so in the manner described in the next sections.

For both Category A and Category B applications an oral presentation on your work will be part of the assessment. You will probably require some practice and training for this. The presentation may either take the form of a seminar, (which could be a 'junior seminar') or it may be part of the transfer interview.

Below is a useful checklist for you to use to support you through the preparations for your transfer of status assessment. In order for transfer of status to be conferred, the assessors must be satisfied that:

- 1. You have proposed a viable DPhil project that can be completed within your funded period, or within 12 terms (for DPhil) or 9 terms (for MSc by Research).
- 2. The work undertaken to date provides an appropriate background and platform for progress.
- 3. You have developed a critical understanding of the relevant literature.
- 4. You understand, can justify, and defend your research project, its objectives and rationale.
- 5. You have a clear plan for the future direction of the project.
- 6. You have begun to take intellectual ownership of the project.

In addition to the above the assessors will also examine your Skills Training.

You must also complete your user profile on the Maths website, as explained at https://www.m aths.ox.ac.uk/members/it/faqs/www/personal-web-space, with (as a minimum) a short description in non-technical language of your research project.

7.3.2 Timing the application

If you choose to make a Category B application, this should be done in your first term. If you fail to secure a Category B transfer to DPhil status you will be allowed to apply subsequently to transfer under Category A: one further application in Category A is allowed, provided that you made your first attempt well before the sixth term of the probationer period.

Transfer of status under Category A should normally be completed by the end of your fourth term, which means that you must have applied for transfer of status, submitted the transfer thesis and undergone a transfer interview by Friday of 0th week of your fifth term (see Key dates). You must ensure that you allow sufficient time between submitting your application for transfer of status and your transfer interview. You must therefore submit your application for transfer of status (forms GSO.2 and MATHS.1) and your transfer thesis by early in your fourth term. If you are unable to transfer status by the end of your fourth term you must formally apply for a deferral by completing and submitting form GSO.2b to the Graduate Studies Office.

In the term before you expect to transfer status you are expected to complete a 'Preparing for Transfer of Status' form in GSR as your term's report, as described in Section 7.1.

Instead of making a Category A application for transfer to DPhil status, you may instead apply for transfer to MSc by Research status. The procedure is similar except that no written work is needed.

7.3.3 Making the application for transfer to DPhil Status

To make an application the following must be submitted:

- 1. A university application form for transfer from PRS to DPhil status (form GSO.2(MPLS));
- 2. A departmental application form (MATHS.1);
- 3. A description of the work undertaken in preparation for research, giving details of complementary skills training and workshops and conferences attended (this must accompany form MATHS.1);
- 4. Two copies of a dissertation of between 25–50 pages of ${\rm IAT}_{\rm E}{\rm Xin}$ a font no smaller than 11pt.

Forms GSO.2(MPLS) and MATHS.1 are available from http://www.ox.ac.uk/students/academic/guidance/graduate/progression/.

These two forms should be completed by yourself and your supervisor, and form GSO.2 should also be signed on behalf of your college (usually by the Senior Tutor). Both forms should then

be forwarded to the departmental Graduate Studies Administrator (S0.23), who will arrange for them to be checked and signed by the Director of Graduate Studies.

In consultation with you, your supervisor will nominate two assessors, subject to departmental approval, who will read your submitted work and then interview you. Normally the assessors will be permanent members of the department, and the Director of Graduate Studies should be consulted if anyone else is being proposed.

The written work must be sent directly to the assessors by the date you have indicated on the MATHS.1 form. It is essential that you inform the Graduate Studies Administrator when this has been done; otherwise the office will be unable to send the assessors the correct forms and information.

7.3.4 After the application has been made

After submission of your written work you should expect your assessors to approach you to fix a time for your interview. If they do not approach you, please arrange for your supervisor to contact them directly.

Although the transfer is a formal examination, the interview will be conducted informally. There will be an opportunity for you to discuss your research plans, but the major portion of the time will probably be taken up by the assessors orally examining you on the work submitted. The form of the interview will depend considerably on circumstances, and your supervisor may be able to help by providing you with some general indication of what to expect. In all cases, however, you can be assured that, unlike undergraduate examinations, you will not be expected to commit every detail to memory. The length of the interview can vary, but it is likely to last between 1–2 hours.

Having completed the interview the assessors will prepare a report covering the written work, the oral presentation and the interview, based on the checklist given in Section 7.3.1. It is the responsibility of the Director of Graduate Studies to decide in the light of this report whether to approve the application to transfer status. The possible outcomes are:

Pass:

- Transfer to DPhil status without reservations.
- Transfer to DPhil status if a satisfactory written response to this report is obtained, signed by both the student and supervisor (to be returned within 2 weeks).
- Transfer to DPhil status but follow-up action required. The requested action should be completed normally within the next 2 months and submitted to the DGS for review.

Fail:

• Student should make a 2nd and final attempt to transfer to DPhil status within 1 term.

If your 2nd and final application to transfer to DPhil status is unsuccessful you will be allowed to apply for transfer to the status of MSc by Research.

The MSc should not be seen as an inferior version of the DPhil. It is less advanced in the sense that the course of research is generally of shorter duration and also in the sense that it

is a course where diligent scholarship is more likely to ensure a favourable outcome. However, it is a degree with value of its own requiring a different pattern of discipline and training. For some careers, it is considered to provide a better preparation than the DPhil.

7.3.5 Checklist for students

The full 'transfer of status — checklist for students' can be found via the following link: https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/ transfer-and-confirmation-status. The summary below can be used to support you in your preparations for your transfer of status assessment.

• Before applying for transfer of status

- Define/agree proposed research project.
- Complete at least 2–3 broadening courses (October 2019 or earlier starters) or 1–2 courses (October 2020 or after starters).
- Complete the online Research Integrity Training.
- Teach at least one set of intercollegiate classes (for students who started from October 2018).
- Apply for Research Ethics Approval (if relevant).
- Keep a record of any permission for inclusion of 3rd party copyright material: https://libguides.bodleian.ox.ac.uk/digitaltheses/theses_copyright.
- Keep a record of any subject-specific, personal or professional skills which you have acquired during the course of your time as a Probationary Research Student (e.g. research methodology; data analysis and management; bibliographical skills; presentation skills; time management; language skills; IT skills; teamwork; problem solving; teaching skills; career planning).
- Identify any skills which might require further development or refinement.
- Keep a record of any other related activities which have made a contribution to the development of your work (e.g. conferences attended; courses taken; publications submitted).

• Preparing for transfer of status

- Arrange meeting(s) with supervisor(s) to discuss transfer requirements.
- Check department deadlines and requirements for transfer with the departmental Graduate Studies Administrator.
- Following department requirements, draft/prepare written work for transfer, which should include a research proposal and timeline.
- Submit transfer work to supervisor(s) for review.
- Refine/complete transfer work following supervisor feedback.
- Complete any relevant forms and submit to the departmental Graduate Studies Administrator.

- Obtain statement of support from Supervisor.
- Obtain statement of support from College.
- Submit transfer work to the assessors by required deadline, and inform the Graduate Studies Administrator when you have done so.

• After application for transfer of status

- Transfer assessors appointed by the department.
- Transfer interview date arranged with assessors/supervisor.
- Following interview, written feedback received by student and supervisor.
- Official confirmation of assessors' recommendation received by student and supervisor from the MPLS Graduate Office.

7.3.6 Transfer from PRS to MSc by Research

This is similar to the process for transfer to the DPhil, but no written work is required.

7.3.7 Transfer from MSc by Research to the status of DPhil Student

This is similar to the process for transfer from PRS to DPhil student, except that the time limit is nine terms from admission as Probationer Research Student. A student whose application is rejected may re-apply just one more time.

7.4 Confirmation of DPhil status

(Centre for Doctoral Training (CDT) students should refer to the individual CDT handbooks)

The purpose of confirmation of status is to enable research students to receive an assessment of their work by two assessors, other than their supervisor(s). It is intended to provide an indication that, if work on the thesis continues to develop satisfactorily, then submission of the thesis within your funded period/four years (for DPhil) would appear to be reasonable. It therefore provides a second stage of formal progress review in the four years of your overall research programme. It should be noted that successful completion of confirmation of status provides an indicator only for readiness for submission, not for the final outcome of the examination of the thesis.

Confirmation of DPhil status should normally happen in your third year. In any case confirmation of status for DPhil students must take place no later than the end of your ninth term after admission. In order for your confirmation of status to be considered complete by the end of your ninth term you must have applied for confirmation of status, submitted the confirmation work and undergone a confirmation interview by Friday of 0th week of your 10th term (see Key dates). You must have successfully confirmed status before submitting your DPhil thesis. Your application for confirmation (forms GSO.14 and MATHS.3) should be sent to the Graduate Studies Administrator. These forms are available from http://www.ox.ac.uk/students/academic/guidance/graduate/progression/.

As with Transfer of Status, two assessors will be nominated by your supervisor, in consultation with you, and appointed by the department. Your confirmation work should be submitted directly to your assessors. Your confirmation work should normally contain:

- The planned list of chapters for your DPhil thesis.
- An outline of the content of each chapter, highlighting research achievements to date and work remaining to be completed.
- A detailed presentation of some results, e.g. a completed chapter.
- A timetable for submission.

You must also hand in a list of seminars, workshops and colloquia attended, to make a total of at least 20 hours over your career. The assessors will also examine your skills training and broadening programme, to ensure that the required 100 hours have been completed. If you are still taking one or two courses in your third year you may apply for confirmation of status, but this will not be granted until the said courses are satisfactorily completed.

The confirmation assessment is different from the transfer assessment. The assessors will be focusing on how the research is progressing, the quality of the work completed, whether it is at the right level, and on the plan for completion. The assessment can also be used as a good opportunity to prepare for the *vive voce* examination of the DPhil thesis.

Below is a useful check-list for you to use to support you through the preparations for your confirmation of status assessment. For confirmation of status to be conferred, assessors must be satisfied that:

- 1. Your DPhil project is following a trajectory that will lead to completion and submission within the remaining timeframe (and not exceeding 12 terms).
- 2. The work undertaken to date provides a sufficient background and a platform for completion/submission.
- 3. Your work/research has the potential to make a 'significant and substantial contribution' to your field of study
- 4. You have developed critical knowledge and understanding of the relevant literature.
- 5. You understand, can justify and defend your research project, its objectives and rationale.
- 6. You have a clear plan for the future direction of the project.
- 7. You have taken intellectual ownership of the project.

7.4.1 Checklist for students

The full 'confirmation of status — checklist for students' can be found via the following link: https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/ transfer-and-confirmation-status. A summary is given below.

• Before applying for confirmation of status

- Complete all broadening courses.
- Complete the teaching requirement,
- Apply for Research Ethics Approval (if relevant)
- Keep a record of any permission for inclusion of 3rd party copyright material https://libguides.bodleian.ox.ac.uk/digitaltheses/theses_copyright.
- Keep a record of any subject-specific, personal or professional skills which you have already acquired (e.g. research methodology; data analysis and management; record keeping; bibliographical skills; presentation skills; time management; language skills; IT skills; teamwork; problem solving; teaching skills; career planning).
- Identify any skills which might require further development or refinement.
- Keep a record of any other related activities which have made a contribution to the development of your work (e.g. conferences attended; courses taken; publications).

• Preparing for confirmation of status

- Arrange meeting(s) with supervisor(s) to discuss confirmation requirements.
- Check department deadlines and requirements for confirmation with the Graduate Studies Administrator.
- Following department requirements, draft/prepare written work for confirmation, which should include a brief written report about your research achievements to date and timetable for submission.
- Submit confirmation work to supervisor(s) for review.
- Refine/complete confirmation work following supervisor feedback.
- Complete any relevant forms (including GSO.14 and MATHS.3) and submit to the Graduate Studies Administrator.
- Submit confirmation work to the assessors for assessment by required deadline.
- After application for confirmation of status
 - Confirmation assessors appointed by the department.
 - Confirmation assessment date arranged with assessors/supervisor.
 - Following assessment, official confirmation of recommendation received from the MPLS Graduate Office, with a copy of the assessors' report.

If your first application is not successful, you may have one more attempt to confirm DPhil status. If after two attempts it is concluded that your progress does not warrant confirmation of status, your status for the degree of MSc by Research may be approved.

Occasionally students transfer from Probationer Research status to MSc status and then transfer to DPhil status at the end of their third year of study. Such students should apply for confirmation of DPhil status no later than the end of their eleventh term. If the first attempt is unsuccessful, a second try may take place no later than the end of the twelfth term.

7.5 Submission and examination

Guidance on the process involved with submitting a DPhil or MSc by Research thesis can be found via the following link: http://www.ox.ac.uk/students/academic/exams/research.

The guidance provides clear instructions on matters such as appointing examiners, presentation of thesis abstracts, style and format, binding and presentation, date of submission of examiners' copies, oral examination or viva, minor corrections, major corrections, extensions, re-submitting a thesis and deposit and consultation of thesis.

Further important and helpful information can be found in the Examination Regulations http://www.admin.ox.ac.uk/examregs/information/contents/. Note in particular the regulation:

In Mathematics, the text of theses submitted for the Degree of D.Phil. shall not exceed 200 pages, A4 size, double-spaced in normal-size type. This page limit includes references, appendices, numerical tables, diagrams, etc. If a candidate believes their thesis must necessarily exceed this page limit they should write to the DGS for permission to submit a longer thesis, with an explanation of why this is necessary.

The 200-page limit should be taken as applying both for the DPhil and for the MSc by Research.

7.5.1 Thesis submission

When you and your supervisor are agreed that your thesis is within one term (and the vacation which follows) of completion, you should obtain form GSO.3 from the GSO website at http://www.ox.ac.uk/students/academic/guidance/graduate/progression/ and arrange for its completion. The GSO.3 form is now electronic so by clicking on the relevant link you will be taken to your Student Self Service account where you can access the form; detailed instructions with screenshots can be found in the Student Self Service Manual. Once you have submitted your section, the system will automatically send the form to your supervisor for approval. After consulting you, your supervisor must suggest two examiners on this form — one internal and one external, plus a reserve for each. Once your supervisor submits the form it will be sent directly to your college for approval and then to the Director of Graduate Studies for final approval.

An electronic copy of the thesis should be submitted *no more* than a term (and the vacation which follows) after the GSO.3 form has been completed.

7.5.2 Proof-reading

It is your responsibility to ensure your thesis has been adequately proof-read before it is submitted. Your supervisor may alert you if they feel further proof-reading is needed, but it is not their job to do the proof reading for you. You should proof-read your own work, as this is an essential skill in the academic writing process. However, for longer pieces of work it is considered acceptable for students to seek the help of third-party proof-readers, for example, fellow students, friends or family members, or professional proof-readers (you should bear in mind the terms of any agreement with an outside body or sponsor governing disclosure of confidential material or research results described in the thesis). Proof-reading assistance may also be provided as a reasonable adjustment for disability. Your thesis may be rejected by the examiners if it has not been adequately proof-read.

7.5.3 Copyright information

If your thesis is to contain any material where copyright is held by a third party, you should consult the information at https://libguides.bodleian.ox.ac.uk/digitaltheses/theses_copyright.

7.5.4 The viva

Once the thesis has been submitted, the examiners will arrange a date for the *viva voce* (i.e. oral examination). This exmination is formal, so you must wear *sub fusc*. After the examination the examiners will submit their report and recommendation to the Mathematical, Physical and Life Sciences Divisional Board. If, following the *viva*, the examiners are satisfied that:

- i) you possess a good general knowledge of the particular field of learning within which the subject of the thesis falls;
- ii) you have made a significant and substantial contribution in the particular field of learning within which the subject of the thesis falls;
- iii) the thesis is presented in a lucid and scholarly manner;
- iv) the thesis merits the degree of Doctor of Philosophy;
- v) you have presented a satisfactory abstract of the thesis;

then they may recommend that the DPhil be awarded either as the thesis stands or after some corrections have been completed. If the examiners conclude that the thesis has not reached the standard required for a DPhil, they may recommend that you either revise and resubmit your thesis for a DPhil or apply instead for an MSc(Res).

Because the examiners only make a recommendation and the Divisional Board makes the final decision, the examiners are unable to comment to you directly on the outcome of the *viva*.

Once you have successfully passed the *viva* and completed any requested corrections to the examiners' satisfaction, you will be granted *leave to supplicate*, which means that you have

completed the DPhil degree. After you have been given leave to supplicate, you are required to deposit a hard copy of your thesis with the Bodleian Library and a digital copy in the Oxford University Research Archive, as described below, before attending a graduation ceremony.

7.5.5 Oxford Digital Theses

The University of Oxford is committed to the widest dissemination of research theses produced by its graduate students. Students following DPhil and MSc by Research programmes, and registered from 1st October 2007, are required to deposit a hardbound and a digital copy of their thesis with the Oxford University Libraries. The digital copy should be deposited in the Oxford University Research Archive (ORA) at http://ora.ox.ac.uk. ORA provides maximum visibility and digital preservation for Oxford digital theses. Students should read important information about the deposit of and access to digital theses which is available at http://www.bodleian.ox.ac.uk/ora and includes:

- legal requirements and author responsibilities;
- when to deposit the digital copy of your thesis;
- how to deposit the digital copy of your thesis;
- open and embargoed access (for reasons such as sensitive content, material that would affect commercial interests, pre-publication or legal reasons) to all or part(s) of your thesis.

8 Study Requirements

The following information refers to the study requirements and expectations set by the University. Students who are funded by a UK Research Council are also expected to meet the requirements set by UKRI, which can be found in the Statement of expectations for post-graduate training.

8.1 Residency requirements

Graduate students on a full time course must usually reside within 25 miles of the city centre for a minimum period before a degree can be completed. For the MSc by Research in Mathematics the minimum residency period is three terms, and for the DPhil in Mathematics the minimum residency period is six terms, in either case calculated from the term of matriculation.

DPhil students may apply formally for a dispensation from not more than three terms of the residence requirement if it is necessary to their work to study somewhere other than Oxford. It is also possible to obtain dispensation if your supervisor moves to another University in the middle of your course and a suitable replacement cannot be found in Oxford. Dispensation from residence requirements must be applied for using the form GSO.8, which can be found at: http://www.ox.ac.uk/students/academic/guidance/graduate/progression/.

8.2 Suspensions, extensions, lapse of status, and reinstatement

8.2.1 Suspensions

If, for a temporary period, you are unable to pursue your course of study or research, you may apply for suspension of your student status. Relevant circumstances could include illness, accident, domestic crisis or unforeseeable financial difficulty. Alternatively, it might be essential for you to concentrate temporarily on some other project which could not reasonably be deferred until after your postgraduate work was completed; or you might wish to take up temporary work which was likely to be important to your future career, and the opportunity for which is unlikely to recur.

Applications must be made to the Graduate Office using the form GSO.17, which is available from https://www.ox.ac.uk/students/academic/guidance/graduate/progression/exceptional?wssl=1. You will need to specify the exact term(s) for which you require suspension, and must have the support of your supervisor and college. Students are allowed to apply for a maximum of six terms suspension in total. However, you may only apply for a maximum of three terms at any one time.

Students wishing to apply for a suspension of status for Maternity, Paternity or Adoption Leave will need to complete form GSO.17b. Please refer to the Unversity's Student Maternity, Paternity and Adoption leave Policy for further information and guidance; see https://www.ox.ac.uk/students/welfare/childcare

Prior to returning from suspension of status, you need to ensure that you complete the Returning from Suspension of Status form GSO.17a, and return it to the Graduate Studies

Administrator. Failure to return the completed form will delay the reactivation of your University Card.

8.2.2 Sick pay

All students whose stipend is funded by UKRI, the Mathematical Institute, a college or the University, or some combination thereof, are eligible for sick pay for up to 13 weeks within any academic year up until the funding end date of their student award. Once the funding end date of your award has passed (i.e. once you are in extension) you are no longer eligible for sick pay. Students who receive funding from an external source other than UKRI, or a fees-only award from UKRI, are not eligible for sick pay.

Please note that the sick pay is not for short-term absences of a few days or a few weeks. To qualify a student must suspend status for at least one term on medical grounds and provide medical evidence for consideration. Please note also that, if you suspend status for longer than one term due to sickness, for example 2–3 terms consecutively, you will only be eligible for sick pay for 13 weeks of your suspension.

The process for applying for suspension of status on the grounds of ill health is as described above in Section 8.2.1. If you are unwell and wish to suspend status, please complete the usual application form GSO.17 and attach your medical note when submitting the form for signatures. Please submit your request in good time, noting that retrospective applications are not normally permitted.

8.2.3 Extensions

Students working for the DPhil are expected to submit their thesis within three to four years of full-time study. If you are prevented by 'exceptional circumstances' from completing the research within the maximum period normally allowed by the University (9 terms for the MSc by Research, 12 terms for the DPhil), you may apply for an extension of time. The maximum total periods of extension are up to six terms for DPhil and three terms for MSc by Research students. Students are allowed to apply for a maximum of three terms at any one time. However, it is departmental policy to approve an extension of one term only at a time, so that your progress can be kept under close review.

If you need an extension of time, you must apply formally to the Graduate Office using the form GSO.15 (see https://www.ox.ac.uk/students/academic/guidance/graduate/progressio n/exceptional). Your application must be submitted before your status lapses. You must give full reasons for your request, and these must also be supported by your supervisor and college. The Director of Graduate Studies will wish to know the present state of your thesis (i.e. how much has been completed and how much remains to be done) and see to a timetable for completion, including when you expect to apply for confirmation of status (if this is yet to be done), and to submit your thesis. An extension will only be granted if the Director of Graduate will be necessary for you to apply for subsequent reinstatement if you wish to resume work or submit your thesis.

8.2.4 Lapse of status

Your status as an enrolled research student will lapse if one of the following occurs:

- You fail to submit your thesis within the allotted time, and without being granted suspension or extension of time.
- You fail to transfer status successfully, within four terms of admission as a full-time student (unless you have been granted a deferral, or an extension following an unsuccessful transfer application).
- The Mathematical Institute deprives you of such status, after consultation with your college advisor.
- For DPhil students only: if you fail to confirm status successfully within nine terms of admission as a full-time student (unless you have been granted a deferral, or an extension following an unsuccessful confirmation application).
- Following your *viva voce* you are required to complete major corrections to your thesis, and fail to complete these within the six months permitted.

Once your status has lapsed, you are no longer registered as a student of the University, and you will not have access to University facilities.

8.2.5 Reinstating your status

To reinstate your status on the graduate register you will need to apply to the MPLS Graduate Office for reinstatement. Applications must be made on the GSO.23 form (see https://www.ox.ac.uk/students/academic/guidance/graduate/progression/exceptional) and must have the support of your supervisor and college. Your application should be accompanied by a clear work plan and timetable, which should be endorsed by your supervisor. If your supervisor is no longer available, your department will need to appoint an assessor to check on the appropriateness of reinstatement. If the assessment is satisfactory then a new supervisor will need to be found for the purposes of submission. If no one is willing or available, then reinstatement is normally declined. Reinstatement should not be regarded as automatic; each case is dealt with on its merits.

When considering applications for reinstatement, the DGS will take into account factors such as the currency and validity of the thesis, the availability of appropriate supervision, and whether you successfully completed Transfer and Confirmation of Status before your status lapsed.

If your status lapsed at the time of your thesis submission deadline reinstatement is usually allowed if you have completed your thesis, and you are ready to submit to have it examined. If your reinstatement is approved you will be given one term in which to submit.

If your status lapsed due to not having successfully completed your transfer of status by the allotted time, a fresh application may be more appropriate. However, if reinstatement is approved then you will need to ensure that you are ready to go through the transfer of status assessment in the term in which you are reinstated. In cases where Confirmation was not

completed, reinstatement is normally dependent on completion of an assessment equivalent to Confirmation (the requirement for the milestone might subsequently be waived) and having sufficient time remaining on the register for you to complete your thesis within the normal time limits.

What fees are payable upon reinstatement? If you lapse/withdraw before the end of your fee liability, on reinstatement you will become liable for any outstanding fees up to the required maximum of nine terms for the DPhil or six terms for MSc by Research.

Reinstatement cases requiring Education Committee approval If you have had twelve terms plus six terms extension (for DPhil students) or nine terms plus three terms extension (for MSc by Research students), then the application for reinstatement must be approved by the University's Education Committee. Your application will also require Education Committee approval if more then twenty-four months has passed since your enrolment was lapsed/withdrawn. The department and Education Committee will want to make sure that your research is still relevant and up to date, and this should be clearly confirmed in your application.

9 Conference and Travel Expenses

(Centre for Doctoral Training (CDT) students should refer to their CDT course handbook for information on conference funding and travel expenses)

9.1 Travel expenses

Research students are entitled to claim up to £2000 towards conference and research travel expenses during their study. In addition, up to £250 per student is available from the Skills Training fund to support activities which may be classified as skills training, for example if the student is making a presentation of their work. Applications should always be made in advance of any travel and will need the support of the student's supervisor. Forms for this purpose can be found here: https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/travel-grants.

If an application is not made in advance reimbursement cannot be guaranteed as funds may be exhausted. In exceptional circumstances a case for retrospective reimbursement may be made. Original itemised receipts need to be submitted with the claim form for any reimbursement that is being claimed. It is possible to make multiple claims for one trip, e.g. to claim for flights prior to travel (as long as a receipt/booking confirmation is available) with all remaining claims made after travel as soon as receipts are available. The University Financial Regulations and the Expenses and Benefits Guide can be found at http://www.admin.ox.ac.uk/finance/policies/financialregulations/ and http://www.admin.ox .ac.uk/finance/epp/expenses/guide/.

In addition to travel and conference costs, students may also apply for the reimbursement of reasonable costs arising from their transferable skills training programmes.

9.2 Travel insurance

The University's travel insurance should always be used when making trips within the UK or abroad. Medical cover is not available for trips within the UK but all other sections of the insurance are provided. If the University's travel insurance is not used, any personal insurance will only be reimbursed if the insurance was for a single trip and there was a good reason not to use the University's insurance. Please see the link https://www.admin.ox.ac.uk/finance/insurance/travel/ for information on the University's travel insurance.

10 IT Facilities in the Mathematical Institute

10.1 Computer provision

It is the policy of the MPLS Division that all departments ensure that PGR students have access to adequate personal computing resources to enable them to work effectively on their projects. You should discuss what computing facilities are available to you with your supervisor(s). If you are unhappy with your computing provision you should let your supervisor(s) know, and if this issue is not resolved satisfactorily you should raise the issue with the Director of Graduate Studies.

10.2 Applying for computer resources

For an account on the Mathematical Institute network, you should complete the application form included in your induction pack, and return it to the Graduate Studies Administrator, who will provide your login details. Nobody may use the resources of the Mathematical Institute without signing an application form, nor continue to do so once their account has expired.

The academic network is primarily Linux based with almost 3000 installed packages per machine. Almost all student offices are equipped with one machine per person. If you would like the number of machines in an office increased, contact help@maths.ox.ac.uk to discuss it. A list of all public machines and their specifications is available on the IT help web pages at https://www.maths.ox.ac.uk/members/it/support.

The department has a Windows Terminal Server (wts) that can be remotely accessed from the Linux machines should you need access to Microsoft only applications, e.g. MS Office. As well as the Linux machines there are a number of Microsoft Windows XP workstations in the public computer rooms.

For details of how and where to obtain IT help relating to the departmental systems see https://www.maths.ox.ac.uk/members/it/support. If you experience difficulties in accessing or using any departmental IT resources, please send an email to help@maths.ox.ac.uk. Note that there are also signs above the printers and outside the computing officer rooms with details of how best to report problems and how to get IT help should you need it.

10.3 Using your own computer

Information about how to connect your laptop to the department network can be found at https://www.maths.ox.ac.uk/members/it/support.

11 Libraries

Information about all Oxford libraries can be found at: http://www.bodleian.ox.ac.uk/subjects-and-libraries/libraries

11.1 Whitehead Library, Mathematical Institute

Contact: Ms Cathy Hunt (Librarian) Email: library@maths.ox.ac.uk Website: https://www.maths.ox.ac.uk/members/library

The Whitehead Library holds material covering mathematical topics at postgraduate and research level. It is primarily for the use of current postgraduate students and academic staff of the Mathematical Institute. Your University Card will have been activated to open the library door and will give you 24/7 access.

Books taken out of the Library must be checked-out on the SOLO computer loan system at the terminal in the library. Please note that books are not allowed to be taken away from Oxford.

11.2 Radcliffe Science Library (RSL)

Website: https://www.bodleian.ox.ac.uk/libraries/vhl/rsl

The Radcliffe Science Library is the science library of the Bodleian and includes mathematics books at graduate and research level.

11.3 College Libraries

You will have access to the library in your own college.

Information about all Bodleian libraries can be found at: https://www.bodleian.ox.ac.uk/libraries,non-Bodleian libraries at: https://www.bodleian.ox.ac.uk/other-libraries-at-oxford and College libraries at: https://libguides.bodleian.ox.ac.uk/colleges .

12 Consultative Committee with Graduates

Graduate students views are fed into the departmental structure via the Consultative Committee with Graduates (CCG). The committee's operation is described in the following standing order:

There shall be a Consultative Committee with Graduates members reading for higher degrees, and the Directors' of Graduate Studies. There should be at least three junior representative from the DPhil in Mathematics and one junior representative from each taught MSc course and CDT offered by the department.

Committee members shall be elected from amongst graduate students admitted by the Mathematical Institute. Nominations and self-nominations shall be invited by circulating these graduate students electronically in Week 0 of Michaelmas Term. If necessary elections shall be held electronically during the first week of Michaelmas Term, with three days being given for voting. The one student with the most votes from each MSc and CDT and the three research students (DPhil) with the most votes, and the five remaining students (either MSc or DPhil) with the most votes will be elected. The Committee shall have the power to co-opt junior members such that membership is complete. The committee may operate, if necessary, without its full complement of places having been filled.

The committee shall be concerned with matters such as the syllabus, teaching arrangements, library facilities, office facilities, and the general aspects of examinations. It shall annually review examiners reports for the taught MSc's. Where items on the agenda are not relevant to or appropriate for taught masters' students items will be discussed on a separate agenda focusing on research degree matters. The Director of Graduate Studies(R) shall be the chairman of the committee. The Graduate Studies Administrator or another member of Mathematical Institute staff shall act as secretary to the committee. The Consultative Committee with Graduates reports to the Graduate Studies Committee.

The Committee shall be able as of right to address a communication direct to the Graduate Studies Committee, Departmental Committee, the Research Committee, or the Teaching Committee, of the Mathematical Institute depending on the matters involved. Unless the chairman shall order otherwise, the committee shall meet at 1pm on Tuesday in the third week of each Full Term.

Information can be found at https://www.maths.ox.ac.uk/members/students/postgraduate-courses/doctor-philosophy/consultative-committee-graduates.

13 Evaluation and feedback

The department will ask you for your feedback every two years via the Research Student Survey on the following matters: the handbook/general information, courses and teaching, supervision and general facilities. The responses will be reviewed by the CCG and the Graduate Studies Committee. You will receive a notification of any action taken following your feedback in October of the year in which the survey was conducted. The last survey was conducted in 2021 and the next survey is due to take place in 2023.

Students on full-time and part-time matriculated courses are surveyed once a year on all aspects of the course (learning, living, pastoral support, college) through the Student Barometer. Previous results can be viewed at: https://www.ox.ac.uk/students/life/student-surveys.

14 Hardship funding

It is expected that all students will secure the necessary funds to cover their fees and living costs before arriving at Oxford. However, the University and its colleges have limited funds available to students who experience unexpected financial difficulties after starting their course.

Hardship funds are not intended for students who just run out of money before finishing their degree; they are there to provide help in unforeseen situations. If you are in need of hardship funding, you should consult the following: http://www.ox.ac.uk/students/fees-funding/assistance/hardship.

15 Department and University Policy Statements

15.1 Complaints and academic appeals within the Mathematical Institute

The University, the MPLS Division and the Mathematical Institute all hope that provision made for students at all stages of their course of study will result in no need for complaints (about the provision) or appeals (against the outcomes of any form of assessment). Where such a need arises, an informal discussion with the person immediately responsible for the issue that you wish to complain about (and who may not be one of the individuals identified below) is often the simplest way to achieve a satisfactory resolution.

Many sources of advice are available from colleges, faculties/departments and bodies like the Counselling Service and Oxford SU Student Advice Service. You may wish to take advice from one of these sources before pursuing your complaint or appeal.

General areas of concern about provision affecting research students as a whole can be raised through the Consultative Committee with Graduates or via student representation on the department's committees.

15.1.1 Complaints

If your concern or complaint relates to teaching or other provision made by the department, then you should raise it with the Director of Graduate Studies: Prof. Marc Lackenby (marc.lackenby@maths.ox.ac.uk) and/or Prof. Peter Howell (peter.howell@maths.ox.ac.uk) as appropriate. Complaints about departmental facilities should be made to the Departmental Administrator. If you feel unable to approach one of those individuals you may contact the Head of Department (head-department@maths.ox.ac.uk). The officer concerned will attempt to resolve your concern/complaint informally in the first instance.

If you are dissatisfied with the outcome, then you may take your concern further by making a formal complaint to the Proctors under the University Student Complaints Procedure: https://www.ox.ac.uk/students/academic/complaints.

If your concern or complaint relates to teaching or other provision made by your college, you should raise it either with your tutor or with one of the college officers, e.g. the Senior Tutor or the Tutor for Graduates (as appropriate). Your college will also be able to explain how to take your complaint further if you are dissatisfied with the outcome of its consideration.

15.1.2 Academic appeals

An academic appeal is an appeal against the decision of an academic body (e.g. transfer or confirmation decisions), on grounds such as procedural error or evidence bias. There is no right of appeal against academic judgement.

If you have concerns about your assessment process or outcome it is advisable to discuss these first informally with your Course Director, Director of Graduate Studies, supervisor, college advisor or Graduate Studies Administrator. They will be able to explain the assessment process that was undertaken and maybe able to address concerns. Queries must not be raised directly with the examiners. If you still have concerns you can make a formal appeal to the Proctors under the University Academic Appeals Procedure: https://www.ox.ac.uk/students/academic/complaints.

15.2 University policy on intellectual property

The University of Oxford has in place arrangements governing the ownership and exploitation of intellectual property generated by students and researchers in the course of, or incidental to, their studies. These arrangements are set out in the University's Statutes 2013 under which the University claims ownership of certain forms of intellectual property which students may create. The main provisions in the Statutes can be found in the Regulations for the Administration of the University's Intellectual Property Policy (http://www.admin.ox.ac.uk/statutes/ regulations/182-052.shtml).

15.3 Regulations relating to the use of IT facilities, data protection, and computer misuse

Students must familiarise themselves with regulations relating to the use of information technology, data protection and computer misuse, which can be found via the following links:

http://www.it.ox.ac.uk/policies-and-guidelines

http://www.admin.ox.ac.uk/councilsec/compliance/dataprotection

15.4 Safety information

These notes give some information about the safety arrangements at the Mathematical Institute. For further information, please see https://www.maths.ox.ac.uk/members/health-safety/induction.

15.4.1 Action in case of emergency

To summon the FIRE BRIGADE, AMBULANCE SERVICE and/or POLICE, DIAL 9-999. Note that 9-999 can be dialled from any internal University telephone extension, even if it is otherwise barred from making outside calls.

For **SERIOUS ACCIDENTS** or **FIRES** on University premises, immediately after arranging for the emergency servises, telephone again the *Security Services* (89999).

Remember that unless there is a continuing risk to others or to property, the law requires that in cases of serious accidents or fires the scene must remain undisturbed until it is examined by the Health and Safety Executive, the University Safety Office and Trade Union safety representatives. Some types of serious accident must be reported immediately. In those cases, the Safety Office is responsible for contacting the Health and Safety Executive.

15.4.2 Statement of safety policy

It is the policy of the University to ensure that all members of the University and its staff are aware of their individual responsibilities to exercise care in relation to themselves and those who work with them. To this end individuals are enjoined to:

- 1. familiarise themselves with University Safety Policy and any departmental safety requirements (http://www.admin.ox.ac.uk/safety/hs-mgement-policy/);
- 2. take reasonable care that all procedures used are safely carried out, and seek expert advice in any case of doubt;
- 3. warn of any special or newly identified hazards in present procedures or risks in new procedures about to be introduced;
- 4. report accidents or incidents promptly;
- 5. familiarise themselves with fire and emergency drills (including the location of emergency telephones) and escape routes.

15.4.3 Statement of Health and Safety Organisation

Please see https://www.maths.ox.ac.uk/members/health-safety/statement for a statement of Health and Safety Organisation

15.4.4 Departmental health and safety committee

The membership and responsibilities of the Safety Committee can be found at https://www.maths.ox.ac.uk/members/governance/committees/standing-orders-and-member ships/health-safety-committee.

15.5 Code of practice on harassment

The Mathematical Institute is committed to creating a happy and healthy working environment, where everyone is treated with respect and dignity. We do not tolerate any form of harassment or bullying. The department subscribes to the University code of practice relating to harassment, which can be found via the following link: http://www.admin.ox.ac.uk/eop/harassmentadvice/.

The department also has several Harrassment Advisors who can offer confidential support and advice and are a good first contact for help: see

https://www.maths.ox.ac.uk/members/students/postgraduate-courses/student-problem-resources/resources/harassment.

15.6 Equality, diversity and inclusion

The department subscribes to the University Equality Policy: see https://edu.admin.ox.ac.uk/ equality-policy.

The Mathematical Institute also has its own Good Practice Statement, which may be found at https://www.maths.ox.ac.uk/members/good-practice/. The statement asserts the department's commitment to creating an outstanding working environment, in which all are treated equally in their prospects, recognition and progression, with particular emphasis on those from under-represented, minority or disadvantaged groups. This commitment is overseen by the Equality, Diversity & Inclusion Committee.

The department's initiatives to provide a supportive environment for all include Mathematrix, a student-led discussion group where postgraduates, postdocs and staff explore topics related to the challenges in being a minority in the mathematics community, and "women's coffee" meetings for female and trans* students and staff that run fortnightly during term.

The department's Athena Swan Silver Award was renewed in 2021 and reflects the work put in to increase gender diversity in a subject that, while predominantly still male, is becoming more balanced.

The Mathematical Institute is committed to making its teaching and other resources, facilities and services available to students with disabilities to ensure that they are not at a disadvantage. The department's full statement on disability may be found at https://www.maths.ox.ac .uk/members/policies/disability. If you think you might require support during your studies, or alternative arrangements for examinations, you should consult the Disability Coordinator and/or the University Disability Advisory Service (https://www.ox.ac.uk/students/welfare/ disability/aboutdas).

15.7 Policy on student parents

Whether you already have a child or are about to become a parent, a wealth of services are available to support you in Oxford. The University's Student Maternity, Paternity and Adoption leave policy (https://www.ox.ac.uk/students/welfare/childcare) provides details of how much leave students are entitled to, access to University facilities, graduate accommodation and childcare services and the provision for a flexible return to full-time study. Postgraduate research students should particularly note the requirements for applying for maternity or paternity leave, including the forms required and timings for notifying their college, supervisor and Director of Graduate Studies.

Further information on funding for parental leave for research students can be found via the following link: https://www.mpls.ox.ac.uk/graduate-school/funding-for-graduate-students/funding-for-parental-leave.

16 Student support

The University provides a number of specialist services which work to assist our students with any queries or concerns they may have regarding matters such as disabilities, childcare, councilling or careers advice.

- http://www.ox.ac.uk/students/welfare
- http://www.ox.ac.uk/students/welfare/disability
- http://oxfordnightline.org/
- https://www.oxfordsu.org/wellbeing/student-advice/
- http://www.admin.ox.ac.uk/childcare/