



MSC IN MATHEMATICAL AND THEORETICAL PHYSICS AND MMATHPHYS IN MATHEMATICAL AND THEORETICAL PHYSICS 2022

Fifth Notice to Candidates

This circular contains information about:

- Trinity term weeks 6-8 examinations
- Where and how to submit your dissertations and take-home exams
- Late submission penalties.

The full Regulations are contained in the Examination Decrees and Regulations for the MSc in Mathematical and Theoretical Physics examination <u>here</u> and MMathPhys in Mathematical and Theoretical Physics examination <u>here</u>.

Prof. Alexander Schekochihin Chairman of Examiners May 2022



Format of Papers

Examinations will be in person, partially open book exams: students will be permitted to bring one summary sheet of A4 notes (with notes permitted on both sides, on a piece of paper) into the examination. Naturally there will be appropriate individual modifications to the "one sheet of A4" constraint for students with relevant disabilities. The summary sheet is not part of your assessment therefore, you are not required to submit your summary sheet with your scripts.

To better understand what to expect from a partially open book examination question, please see the appendix for the checklist given to assessors who are setting the questions.

The weeks 6-8 Trinity term examinations will be taken in person in the Examination Schools. The examination timetables for week 6-8 are available to view now via your student self-service portal.

Timetable

Trinity Term Written Examinations will take place between Monday 30th May and Friday 10th June 2022 inclusive.

Timetables can be found <u>here</u> for MSc in Mathematical and Theoretical Physics students and <u>here</u> for MMathPhys in Mathematical and Theoretical Physics students.

Exam	Exam Duration	Materials allowed/not allowed
Advanced Quantum Theory (C6)	2 hours	Calculator allowed
Algebraic Geometry	1 hour 45 minutes	Calculator not allowed
Algebraic Topology	1 hour 45 minutes	Calculator not allowed
Applied Complex Variables	1 hour 45 minutes	Calculator not allowed
Differentiable Manifolds	1 hour 45 minutes	Calculator not allowed
Elasticity and Plasticity	1 hour 45 minutes	Calculator not allowed
General Relativity I	1 hour 45 minutes	Calculator not allowed
General Relativity II	1 hour 45 minutes	Calculator not allowed
Geophysical Fluid Dynamics	2 hours	Calculator allowed
Homological Algebra	1 hour 45 minutes	Calculator not allowed
Introduction to Quantum Information	1 hour 45 minutes	Calculator not allowed
Introduction to Schemes	1 hour 45 minutes	Calculator not allowed
Laser Science and Quantum Information Processing (C2)	3 hours	Calculator allowed
Low-Dimensional Topology and Knot Theory	1 hour 45 minutes	Calculator not allowed
Numerical Linear Algebra	1 hour 45 minutes	Calculator not allowed
Perturbation Methods	1 hour 45 minutes	Calculator not allowed
Random Matrix Theory	1 hour 45 minutes	Calculator not allowed
Riemannian Geometry	1 hour 45 minutes	Calculator not allowed
Solid Mechanics	1 hour 45 minutes	Calculator not allowed
Stochastic Differential Equations	1 hour 45 minutes	Calculator not allowed
Topics in Fluid Mechanics	1 hour 45 minutes	Calculator not allowed

Computer algebra packages are not permitted for written examinations.

Conduct of Examination Sessions

You should arrive 20 minutes before the start of each of your papers. You must take your University card with you to each examination and it must be displayed on your desk with the photograph side facing upwards.

Desks will be numbered, and alphabetised lists will be displayed throughout the reception areas and outside individual examination rooms telling each candidate in which room and at which desk they will take their exam in that session. On reaching your desk you should check that the correct question paper has been provided but should not open the paper until the invigilator declares the start of the examination.

The invigilator will read out a list of instructions on procedure at the start of each examination. You should note in particular that you are not permitted to leave the examination room except with the permission of the invigilator. Candidates are not permitted to leave during the first 30 minutes nor the last 30 minutes of an examination. You may take your question paper with you at the end of the examination but no other paper may be removed from the examination room.

The number of questions which need to be answered per paper remains the same as per pages 10-13 of the Mathematical and Theoretical Physics examination conventions.

Queries during the Examination

If you believe that a question is incorrect or ambiguous, you may write on your script what your query is, and how you are interpreting the question.

Scripts

You may write on both sides of the paper. You should take careful note of the rubric for each paper. It is essential that your candidate number be written correctly and legibly on the front page of each answer booklet. You must start each question in a new booklet.

Handing in of Scripts

You must order your answer booklets by question number and secure with the treasury tag provided. Then, on the front page of the top booklet, list the question numbers of the questions attempted. If you have not attempted any questions, you must hand in an empty booklet, with the front page completed, stating that no questions were attempted.

Rough work

No special paper is provided for rough work. A separate answer booklet may be used for rough working, and should be labelled as such: these booklets must be handed in at the end of the examination. Alternatively, you may do rough working in the same booklet as your fair copy. In this case you should cross through all rough working to indicate very clearly to the Examiners what is to be marked and what is not.

Illegible Scripts

Please write legibly and remember that you must not write in pencil, except to draw diagrams. Examiners may require illegible scripts to be transcribed. The cost of transcription is charged to the candidate.

<u>Illness</u>

If you are prevented by illness or other cause from attending any part of the examination you should ensure that the Senior Tutor of your college is informed immediately. In the case of illness a medical certificate will be required.

MSc in Mathematical and Theoretical Physics and MMathPhys in Mathematical and Theoretical Physics

The formal procedures determining the conduct of University examinations are established and enforced by the Proctors.

The Examiners are nominated by the Nominating Committee in the Mathematical Institute and Department of Physics. These nominations are submitted for approval by the Vice-Chancellor and the Proctors. Assessors are appointed to assist the examiners and in particular the core course lecturers take on the role of assessors in setting, checking and marking the written exam papers.

It must be stressed that to preserve the independence of the Examiners, candidates are not allowed to make contact directly about matters relating to the content or marking of papers. Any communication must be via the Senior Tutor of your college, who will, if he or she deems the matter of importance, contact the Proctors. The Proctors in turn communicate with the Chair of Examiners.

Dissertation

The submitted dissertation should conform to the following points.

- The dissertation must include an abstract and a bibliography.
- The dissertation must be typed and have a font size of 12pt.
- The text should be double spaced.
- The dissertation should have a title page which includes the following:
 - the title of dissertation,
 - o the candidate's examination number,
 - o the title of the candidate's degree course,
 - the term and year of submission.

Its length should not exceed 30 pages for a single unit and 60 pages for a double unit. The page count may exclude any table of contents, diagrams, tables, bibliography, dedications/acknowledgements, abstract and the texts of computer programs. However any footnotes and appendices must be included.

A hard copy of your dissertation is not required.

Electronic Copy Submission

- You should submit an electronic version of your Dissertation via Inspera by 12 noon (BST) on Monday 30th May 2022
- Please give the file you are submitting your candidate number as its name. You should not include any identifying information other than your candidate number. You must not write your name or college on your work.

Take-Home Exam

• Radiative Processes and High Energy Astrophysics

The **Radiative Processes and High Energy Astrophysics** take-home exam will be released via Inspera at 12:00 noon (BST) on **Tuesday 21st June 2022** and the submission deadline is 12:00 noon on **Thursday 23rd June 2022**.

Electronic Copy Submission:

You should submit an electronic version of your Radiative Processes and High Energy Astrophysics take-home exam via Inspera by **12 noon on Thursday 23rd June 2022**

• Please give the file you are submitting your candidate number as its name. You should not include any identifying information other than your candidate number. Remember not to include your name or college on your work.

A hard copy of your take-home exam is not required.

Important: When submitting a file to Inspera remember to press the "Submit" button after uploading the file as this alone does not submit you work. If you fail to press submit by the deadline you will be recorded as a late hand-in.

Presentation of Take-Home Exams

Your take-home exam may be handwritten and should be clearly written and legible. You can present your exam either on lined or unlined paper. You may choose to type your answers to the exam. You should number each page. You must not write your name on your take-home exam; the only identification should be your candidate number. If hand written the exam needs to be scanned and uploaded to Inspera as a PDF.

Queries about Take-Home Exams

If you have any questions about the take-home exams (e.g., requests for clarification), please email: Elizabeth Griffiths at mathematical.physics@maths.ox.ac.uk. These will be passed as appropriate to the relevant assessor and/or the Chairman of Examiners. Any replies will be sent to all students taking that take-home exam. You must not communicate directly with the assessor, nor discuss the exams with each other. Please note that queries which arrive after 5pm will not be passed on to the relevant assessor/Chairman of Examiners until 9am the following day.

Illness

If you are prevented by illness or other cause from attending any part of the examination you should ensure that the Senior Tutor of your college is informed immediately so that they can refer the case to the Proctors. In the case of illness a medical certificate will be required. In the absence of Proctorial permission to be absent the consequence of non-attendance will be failure of the paper.

Late Submission or Failure to Submit Coursework

For detailed information relating to late submission or failure to submit coursework please see page 5 of the <u>Mathematics and Theoretical Physics Examination Conventions</u>

Submitting your dissertation or take-home exam late will incur the following penalties:

Lateness	Penalty, % point reduction
Up to 4 hours	1 %
4–24 hours	10%
24–48 hours	20%
48–72 hours	30%
72 hours – 14 days	35%
More than 14 days late	Fail

Notification of results

The final examiners' meeting will be Tuesday 5th July. It is anticipated that the results will be released in the week beginning 11th July.

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Examination conventions can be downloaded from the course webpage: <u>https://mmathphys.physics.ox.ac.uk/sites/default/files/DraftExamCon2021-</u> <u>22_updated%20for%20QM.pdf</u>

These conventions are a guide to the Examiners and candidates but the regulations set out in the Examination Regulations have precedence. The Examiners normally adhere to the published examination conventions, subject to the guidance of the appointed external examiners, and other bodies such as the Mathematics Teaching Committee, the Mathematical, Physical and Life Sciences Division, the University's Education Committee and the Proctors, who may offer advice or make recommendations to examiners.