

MATHEMATICAL SCIENCES

DIVISION OF MATHEMATICAL AND PHYSICAL LIFE SCIENCES

Lecture List for Trinity Term 2020

There may be late changes and amendments to this Lecture List. For an up-to-date version, please check the Mathematical Institute Website: <https://www.maths.ox.ac.uk/members/students/lecture-lists>
This was version updated 10th May 2020

- Pre-recorded lectures will be published on <http://www.maths.ox.ac.uk/lecture-capture> from end of day on Saturday 25 April 2020.
- Further lectures may be released as the term progresses. The Academic team will notify students when this is the case.
- Graduate course directors and administrators will be in touch regarding set up for their lectures (including access links for live sessions where applicable).
- Lectures organized by the Department of Statistics and Department of Computer Science will confirm the status of these lectures and any arrangements put in place.

Subject	Lecturer	Time (where applicable)	Details
ADVANCED CLASSES			
Functional Analysis	Prof Stuart White	T. 4-5.30pm	Zoom, Prof White will confirm the details
Logic	Prof Ehud Hrushovski	TBC	Microsoft Teams
Topology	Prof Ulrike Tillmann and Prof Andre Henriques	TBC	Microsoft Teams
GRADUATE LECTURES – <i>Please notify Undergraduate Studies Assistant if you are planning to schedule a graduate lecture</i>			
Contact three-manifolds	Prof Irena Matkovic	Postponed	To be held in Michaelmas 2020
Differential Galois Theory	Nils Matthes	Weeks 1 - 8	Tuesdays 2-3pm Click here to join the class Thursdays 10-11am Click here to join the class
Groups and 3-manifolds	Daniel J. Woodhouse	TBC	To be confirmed
Topics in Combinatorics	Prof Alex Scott	Thursdays 10-12	Via zoom, Prof Scott will confirm the details
Topics in Model Theory	Prof. Ehud Hrushovski	TBC	To be confirmed
TAUGHT COURSE CENTRE			
The Taught Course Centre is a collaboration between the Mathematics Departments at the Universities of Bath, Bristol, Imperial, Oxford and Warwick. It aims to offer approximately 25 graduate level courses over the academic year. Access grid technology will be used so that audiences in all five universities can participate in the lectures. Graduate students should register in advance in order to attend the lectures. For more information about the Taught Course Centre, and for their lecture timetable, please see the website at https://www.maths.ox.ac.uk/groups/tcc			
M.Sc. in MATHEMATICAL AND COMPUTATIONAL FINANCE			
No lectures.			
M.Sc in MATHEMATICAL AND THEORETICAL PHYSICS			
Advanced Topics in Plasma Physics	Prof Alex Schekochihin	Department of Physics will confirm the status and arrangements for these lectures.	
Conformal Field Theory	Dr Heeyeon Kim/Dr Wolfger Peerlears	To be confirmed	
Disc Accretion in Astrophysics	Prof. Philip Podsiadlowski	Department of Physics will confirm the status and arrangements for these lectures.	

Quantum Field Theory in Curved Space-Time	Prof. Philip Candelas and Prof. Lionel Mason	To be confirmed	
Quantum Matter	Prof. Steve Simon	Department of Physics will confirm the status and arrangements for these lectures.	
Radiative Processes and High Energy Astrophysics	Prof Adam Ingram	Department of Physics will confirm the status and arrangements for these lectures.	
String Theory II	Prof. Sakura Schafer-Nameki	To be confirmed	
The Standard Model and Beyond I	Prof. John March-Russell	Department of Physics will confirm the status and arrangements for these lectures.	
The Standard Model and Beyond II	Prof. John March-Russell	Department of Physics will confirm the status and arrangements for these lectures.	
Topics in Soft and Active Matter Physics	Prof. Julia Yeomans	Reading course	Department of Physics will confirm the status and arrangements for these lectures.
M.Sc in MATHEMATICAL MODELLING AND SCIENTIFIC COMPUTING			
No lectures.			
M.Sc in MATHEMATICAL SCIENCES			
The lectures below for MATHEMATICS Part C/OMMS all apply.			
M.Sc in MATHEMATICS AND THE FOUNDATIONS OF COMPUTER SCIENCE			
Section A: Mathematical Foundations			
Schedule II			
Topological Groups	Prof Tom Sanders	To be confirmed	
Section B: Applicable Theories			
Schedule I			
Concurrency	Dr Gavin Lowe	Online lectures available at https://www.cs.ox.ac.uk/teaching/materials19-20/concurrency/	
MATHEMATICS			
Prelims			
I: Groups and Group Actions	Prof Ulrike Tillmann	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
II: Analysis III: Integration	Prof Ben Green	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
III: Statistics and Data Analysis	Prof Christl Donnelly and Prof Dino Sejdinovic	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
IV: Constructive Mathematics	Dr Vedit Nanda	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
Part A			
ASO: Number Theory	Prof. Ben Green	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
ASO: Group Theory	Prof. Ulrike Tillmann	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
ASO: Projective Geometry	Prof. Balazs Szendroi	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
ASO: Introduction to Manifolds	Prof. Balazs Szendroi	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
ASO: Calculus of Variations	Prof. James Maynard	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	
ASO: Graph Theory	Prof. Marc Lackenby	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture	

ASO: Special Relativity	Dr Carlo Meneghelli	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture
ASO: Mathematical Modelling in Biology	Prof. Heather Harrington	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture
Part B		
No lectures.		
Part C / OMMS		
No lectures.		
COMPUTER SCIENCE		
Prelims		
Digital Systems	Prof Michael Spivey	Department of Computer Science will confirm the status and arrangements for these lectures.
Imperative Programming III	Dr Dan Marsden	https://www.cs.ox.ac.uk/teaching/courses/2019-2020/imperativeprogramming3/index.html
Introduction to Formal Proof	Prof. Bernard Sufrin	Department of Computer Science will confirm the status and arrangements for these lectures.
Part A		
The COMPUTER SCIENCE Schedule S1 options below all apply		
Part B		
Schedule S1		
Computer Networks	Mr Edmund Pringle	Course materials can be found at https://www.cs.ox.ac.uk/teaching/materials19-20/networks/
Concurrency	Dr Julian Gutierrez	Department of Computer Science will confirm the status and arrangements for these lectures.
Logic and Proof	Dr Pvale Semukhin	Online lectures available at https://www.cs.ox.ac.uk/teaching/materials19-20/logicandproof/
Part C		
Schedule C1		
Requirements	Dr Jun Zhao	Course to be taught remotely. Details will be made available at https://www.cs.ox.ac.uk/teaching/courses/2019-2020/req/
MATHEMATICS AND COMPUTER SCIENCE		
Prelims		
Imperative Programming III	Prof. Peter Jeavons	Department of Computer Science will confirm the status and arrangements for these lectures.
I: Groups and Group Actions	Prof Ulrike Tillmann	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture
II: Analysis III: Integration	Prof. Ben Green	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture
Part A		
See Part A MATHEMATICS lectures above and the Schedule S1(M&CS) lectures below		
Part B		
Schedule S1 (M&CS)		
Computer Networks		Department of Computer Science will confirm the status and arrangements for these lectures.
Concurrency	Dr Julian Gutierrez	Online lectures available at https://www.cs.ox.ac.uk/teaching/materials19-20/concurrency/
Logic and Proof	Dr Christoph Haase	Department of Computer Science will confirm the status and arrangements for these lectures.
Part C		
The COMPUTER SCIENCE Part C Schedule C1 options all apply.		
MATHEMATICS AND PHILOSOPHY		
Prelims		

Mathematics:		
I: Groups and Group Actions	Prof Ulrike Tillmann	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture
II: Analysis III: Integration	Prof. Ben Green	Pre-recorded lecture available here: http://www.maths.ox.ac.uk/lecture-capture
Philosophy:		
Frege	Prof. James Studd	Department of Philosophy will confirm the status and arrangements for lectures.
Part A Mathematics:		
The short option lectures above for MATHEMATICS Part A all apply.		
Part B		
Mathematics: No lectures. See MATHEMATICS above for further details.		
Philosophy: For further Philosophy lectures, please consult the Philosophy lecture list.		
Part C		
Mathematics: No lectures. See MATHEMATICS above for further details.		
Philosophy: For further Philosophy lectures, please consult the Philosophy lecture list.		
MATHEMATICS AND STATISTICS		
Prelims		
The lectures above for MATHEMATICS Prelims all apply.		
Part A		
The lectures above for MATHEMATICS Part A all apply.		
Part B		
No lectures. See MATHEMATICS above for further details.		
Part C		
No lectures. See MATHEMATICS above for further details.		