

**MATHEMATICAL SCIENCES**  
**DIVISION OF MATHEMATICAL AND PHYSICAL LIFE SCIENCES**  
**Lecture List for Trinity Term 2021**

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 version updated 16 June 2021

Events shown on this list are generally one hour long unless stated otherwise.

<i>Subject</i>	<i>Lecturer</i>	<i>Time*</i>	<i>Place</i>
<b>ADVANCED CLASSES</b>			
Functional Analysis	Prof Stuart White	Th.4 Weeks 1,3,5,7	<a href="https://sites.google.com/view/uk-operator-algebras-seminar/home">https://sites.google.com/view/uk-operator-algebras-seminar/home</a>
Topology	Prof. Ulrike Tillmann, Dr Andre Henriques and Dr Lukas Brantner	M.11	Online
<b>GRADUATE LECTURES</b> – <i>Please notify Undergraduate Studies Assistant if you are planning to schedule a graduate lecture</i>			
Applied Topology Seminar	Prof. Dawid Kielak, Prof. Andras Juhasz & Dr Andre Henriques	F.3	Online <a href="https://www.maths.ox.ac.uk/events/list/633">https://www.maths.ox.ac.uk/events/list/633</a>
Applied Topology reading group	Dr Kelly Spendlove, Dr Vidit Nanda	F. 9	Online <a href="https://www.maths.ox.ac.uk/events/list/3368">https://www.maths.ox.ac.uk/events/list/3368</a>
Contact three-manifolds	Irena Matkovic	T. 1.30	
Computational Mathematics and Applications Seminar	Prof. Andy Wathen and Dr Tyrone Rees (RAL)	Th.2	A link for this talk will be sent to the mailing list a day or two in advance. If you are not on the list please contact <a href="mailto:trefethen@maths.ox.ac.uk">trefethen@maths.ox.ac.uk</a> <a href="https://www.maths.ox.ac.uk/events/list/635">https://www.maths.ox.ac.uk/events/list/635</a>
Discrete Mathematics and Probability Seminar	Prof Christina Goldschmidt and Prof Alex Scott	T. 2 T3.30	Online (Zoom) <a href="http://people.maths.ox.ac.uk/scott/dmp.htm">http://people.maths.ox.ac.uk/scott/dmp.htm</a>
Extensions of Functions	Dr. Krzysztof Ciosmak	May 18,19 11-12.30 May 25, 26 11-12.30	<a href="#">See the OxPDE webpage</a>
Fridays@4	Prof. Sam Cohen	F. 4	Link to be posted to this page 30 minutes before the event <a href="https://www.maths.ox.ac.uk/events/list/3005">https://www.maths.ox.ac.uk/events/list/3005</a>
Introduction to Hodge theory	Tiago J. Fonseca, Nils Matthes	M. 2 Th. 10	<a href="#">Link to Teams session</a>
Introduction to SPDEs from Probability and PDE	Prof. Endre Suli, Prof Gui-Qiang Chen	Various dates starting 20 <sup>th</sup> April. See link for details.	<a href="#">See the OxPDE webpage</a>
Junior Algebra and Representation Theory	James Timmins and Ruben La	F.2	<a href="https://www.maths.ox.ac.uk/events/list/3129">https://www.maths.ox.ac.uk/events/list/3129</a>
Lévy Processes Reading Group	Terence Tsui, Zheneng Xie	TBA	<a href="https://zhenengxie.github.io/levy">https://zhenengxie.github.io/levy</a>
Mathematical Biology & Ecology Seminar	Prof Philip Maini, Prof Peter Minary	F.2	Teams <a href="https://www.maths.ox.ac.uk/events/list/659">https://www.maths.ox.ac.uk/events/list/659</a>
Mathematical Geoscience	Prof. Ian Hewitt	F2. (even weeks)	Online <a href="https://www.maths.ox.ac.uk/events/list/663">https://www.maths.ox.ac.uk/events/list/663</a>

Networks Seminar	Karel Devriendt and Rodrigo Leal Cervantes	T.2	<a href="https://www.maths.ox.ac.uk/groups/networks/networks-seminar">https://www.maths.ox.ac.uk/groups/networks/networks-seminar</a>
Numerical Analysis Group Internal Seminar		T. 2	A link for this talk will be sent to the mailing list a day or two in advance. If you are not on the list please contact <a href="mailto:trefethen@maths.ox.ac.uk">trefethen@maths.ox.ac.uk</a> <a href="https://www.maths.ox.ac.uk/events/list/670">https://www.maths.ox.ac.uk/events/list/670</a>
Nonlinear PDE	Prof Gui-Qiang G. Chen	Th. 3:30 - 5:30	Further details TBA
Partial Differential Equations Seminar	Prof Andrea Mondino, Prof Luc Nguyen, Prof Qian Wang	M.4 (only 4-5 sessions this term)	Further details TBA
PDE CDT Lunchtime Seminar	Ben Fehrman and Eliana Fausti	Th. 12	Further details TBA
PDE CDT Student Seminar	Chris Irving, James Kohout, Jonah Duncan	F.11	Further details TBA
Random Matrix Theory Seminar	Prof. Jon Keating	T.3.30 (weeks 1-8)	Online <a href="https://www.maths.ox.ac.uk/events/list/3669">https://www.maths.ox.ac.uk/events/list/3669</a>
Rational Points on Curves via Vojta's Inequality	Gabriel Dill	T. 10.30-12	<a href="https://sites.google.com/view/dillgabriel/home/lecture-tt-21">https://sites.google.com/view/dillgabriel/home/lecture-tt-21</a>
Set Theory seminar	Joel David Hamkins	W. 4-5.30	Online <a href="http://jdh.hamkins.org/oxford-set-theory-seminar/">http://jdh.hamkins.org/oxford-set-theory-seminar/</a>
Stochastic Analysis & Mathematical Finance Seminars	Prof. Terry Lyons and Prof Rama Cont	M.4	Online <a href="https://researchseminars.org/seminar/OxfordStochasticAnalysis">https://researchseminars.org/seminar/OxfordStochasticAnalysis</a>
Topics in Combinatorics		Th & F. 9-11 weeks 8-11	Contact <a href="mailto:scott@maths.ox.ac.uk">scott@maths.ox.ac.uk</a> for the link.
Topics in Model Theory	Prof. Ehud Hrushovski	Th.2.30-4.30	<a href="#">On Teams</a>
Topology Seminar	Prof. Dawid Kielak, Prof. Andras Juhasz & Dr Andre Henriques	M.3.45	Links will be published here <a href="https://www.maths.ox.ac.uk/events/list/700">https://www.maths.ox.ac.uk/events/list/700</a>
Quantum Field Theory/Relativity	Dr Keith Hannabuss, Prof Lionel Mason & Dr Florence Tsou	T.12-1:30	Online <a href="https://www.maths.ox.ac.uk/events/list/686">https://www.maths.ox.ac.uk/events/list/686</a>
Vortex Singularities in Ginzburg-Landau Type Problems	Prof Radu Ignat	14 May 10-12 21 May 10-12 28 May 10-12	<a href="#">See the OxPDE webpage</a>
<b>TAUGHT COURSE CENTRE</b>			
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 <a href="https://www.maths.ox.ac.uk/groups/tcc">https://www.maths.ox.ac.uk/groups/tcc</a>			
<b>M.Sc. in MATHEMATICAL AND COMPUTATIONAL FINANCE</b>			
No lectures.			
<b>M.Sc in MATHEMATICAL AND THEORETICAL PHYSICS</b>			
Advanced Topics in Plasma Physics	Prof Alex Schekochihin	M. 5 (wks 1-4) W. 5 (wks 1-4)	On Zoom. Joining details were emailed.

Collisional Plasma Physics	Dr Sarah Newton	M. 11-1	<a href="#">On Teams</a>
Conformal Field Theory	Prof Fernando Alday		Pre-Recorded on <a href="https://weblearn.ox.ac.uk/x/b76zkv">https://weblearn.ox.ac.uk/x/b76zkv</a>
Quantum Field Theory in Curved Space-Time	Prof Lionel Mason		Pre-Recorded on <a href="https://weblearn.ox.ac.uk/x/b76zkv">https://weblearn.ox.ac.uk/x/b76zkv</a>
Quantum Matter	Prof Steve Simon		<a href="#">YouTube, with live Q&amp;A/exam prep sessions via Zoom</a>
String Theory II	Prof Sakura Schafer-Nameki		Pre-Recorded on <a href="https://weblearn.ox.ac.uk/x/b76zkv">https://weblearn.ox.ac.uk/x/b76zkv</a>
The Standard Model and Beyond I	Dr Fabrizio Caola		Pre-Recorded on <a href="https://weblearn.ox.ac.uk/x/b76zkv">https://weblearn.ox.ac.uk/x/b76zkv</a>
The Standard Model and Beyond II	Prof John March-Russell		Department of Physics
Topics in Soft and Active Matter Physics	Prof Ard Louis	Reading course	Department of Physics
<b>M.Sc in MATHEMATICAL MODELLING AND SCIENTIFIC COMPUTING</b>			
C++ for Scientific Computing	Dr. Joe Pitt Francis		TBC
Python for Scientific Computing	Prof. Patrick Farrell		TBC
<b>M.Sc in MATHEMATICAL SCIENCES</b>			
The lectures below for MATHEMATICS Part C/OMMS all apply.			
<b>M.Sc in MATHEMATICS AND THE FOUNDATIONS OF COMPUTER SCIENCE</b>			
<b>Section A: Mathematical Foundations</b>			
<b>Schedule II</b>			
Topological Groups	Prof Tom Sanders		<a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
<b>Section B: Applicable Theories</b>			
<b>Schedule I</b>			
Applied Category Theory		Reading course	Department of Computer Science
Concurrency	Dr Bill Roscoe	M. 10 (wk 1-5) M. 11 (wk 1-5) Th. 11. (wk 1-4) Th. 12 (wk 1-4)	On Teams. See Department of Computer Science for more details.
<b>MATHEMATICS</b>			
<b>Prelims</b>			
I: Groups and Group Actions	Prof Ulrike Tillmann		Pre-recorded lecture available here: <a href="https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims">https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims</a>
II: Analysis III: Integration	Prof. Marc Lackenby		Pre-recorded lecture available here: <a href="https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims">https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims</a>
III: Statistics and Data Analysis	Prof Christl Donnelly and Prof Dino Sejdinovic		Pre-recorded lecture available here: <a href="https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims">https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims</a>
IV: Constructive Mathematics	Prof Patrick Farrell		Pre-recorded lecture available here: <a href="https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims">https://canvas.ox.ac.uk/courses/64592/pages/year-1-prelims</a>
<b>Part A</b>			
ASO: Number Theory	Prof. Kobi Kremnitzer		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>

ASO: Group Theory	Prof. Andrew Dancer		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
ASO: Projective Geometry	Prof. Balazs Szendroi		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
ASO: Introduction to Manifolds	Prof. Kevin McGerty		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
ASO: Calculus of Variations	Prof. James Maynard		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
ASO: Graph Theory	Prof. Marc Lackenby		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
ASO: Special Relativity	Prof. Qian Wang		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
ASO: Mathematical Modelling in Biology	Prof. Philip Maini		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
<b>Part B</b>			
No lectures.			
<b>Part C / OMMS</b>			
No lectures.			
<b>COMPUTER SCIENCE</b>			
<b>Prelims</b>			
Digital Systems	Prof Tam Vu		Department of Computer Science
<b>Part A</b>			
The COMPUTER SCIENCE Schedule S1 options below all apply			
<b>Part B</b>			
<b>Schedule S1</b>			
Computer Networks	Dr Stuart Golodetz and Mr Ahmet Kucuk		Department of Computer Science
Concurrency	Prof A W Roscoe		Department of Computer Science
Logic and Proof	Prof J B Worrell		Department of Computer Science
<b>Part C</b>			
<b>Schedule C1</b>			
Requirements	Dr Jun Zhao		Department of Computer Science
<b>MATHEMATICS AND COMPUTER SCIENCE</b>			
<b>Prelims</b>			
Imperative Programming III	Prof. Peter Jeavons		Department of Computer Science
I: Groups and Group Actions	Prof Ulrike Tillmann		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
II: Analysis III: Integration	Prof. Marc Lackenby		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
<b>Part A</b>			
See Part A MATHEMATICS lectures above and the Schedule S1(M&CS) lectures below			
<b>Part B</b>			
<b>Schedule S1(M&amp;CS)</b>			
Computer Networks	Dr Stuart Golodetz and Mr Ahmet Kucuk		Department of Computer Science

Concurrency	Prof A W Roscoe		Department of Computer Science
Logic and Proof	Prof J B Worrell		Department of Computer Science
<b>Part C</b>			
The COMPUTER SCIENCE Part C Schedule C1 options all apply.			
<b>MATHEMATICS AND PHILOSOPHY</b>			
<b>Prelims</b>			
<b>Mathematics:</b>			
I: Groups and Group Actions	Prof Ulrike Tillmann		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
II: Analysis III: Integration	Prof. Marc Lackenby		Pre-recorded lecture available here: <a href="http://www.maths.ox.ac.uk/lecture-capture">http://www.maths.ox.ac.uk/lecture-capture</a>
<b>Philosophy:</b>			
<b>Philosophy:</b> For further Philosophy lectures, please consult the <a href="#">Philosophy lecture</a> list.			
<b>Part A Mathematics:</b>			
The short option lectures above for MATHEMATICS Part A all apply.			
<b>Part B</b>			
<b>Mathematics:</b> No lectures. See MATHEMATICS above for further details.			
<b>Philosophy:</b> For further Philosophy lectures, please consult the <a href="#">Philosophy lecture</a> list.			
<b>Part C</b>			
<b>Mathematics:</b> No lectures. See MATHEMATICS above for further details.			
<b>Philosophy:</b> For further Philosophy lectures, please consult the <a href="#">Philosophy lecture</a> list.			
<b>MATHEMATICS AND STATISTICS</b>			
<b>Prelims</b>			
The lectures above for MATHEMATICS Prelims all apply.			
<b>Part A</b>			
The lectures above for MATHEMATICS Part A all apply.			
<b>Part B</b>			
No lectures. See MATHEMATICS above for further details.			
<b>Part C</b>			
No lectures. See MATHEMATICS above for further details.			

#### FOOTNOTE REFERENCES

- \* Lectures begin on the first day possible after the beginning of Full Term (Sunday, 25 April), unless otherwise stated in this column. Events take place every Week of Full Term (Weeks 1–8) unless otherwise stated.