

MATHEMATICAL SCIENCES

DIVISION OF MATHEMATICAL AND PHYSICAL SCIENCES

Lecture List for Michaelmas Term 2017

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 14 September 2017

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>
GRADUATE SEMINARS			
Algebra Seminar	Prof. Kevin McGerty, Prof. Nikolay Nikolov and Prof. Martin Bridson	T.2.15–3.30	Mathematical Institute, L4
Algebraic and Symplectic Geometry	Prof. Dominic Joyce and Prof. Balazs Szendroi	T.3.45–5	Mathematical Institute, L4
Analytic Topology in Mathematics and Computer Science	Prof. Samson Abramsky, Dr Peter Collins, Dr Robin Knight, Prof. Hilary Priestley, Prof. Bill Roscoe and Dr Rolf Suabedissen	W.4–5:30	Mathematical Institute, C4
Combinatorial Theory	Prof. Alex Scott	T.2:30–3:45 T.4:30–6	Mathematical Institute, L6
Computational Mathematics and Applications	Prof. Endre Süli and Dr Tyrone Rees (RAL)	Th.2	Mathematical Institute, L4
Cryptography Seminar	Dr Ali El Kaafarani	W.3	Mathematical Institute, L4
Department of Computer Science Seminar	Prof. Georg Gottlob	T.4:30	Department of Computer Science
Fridays@4	Prof. Sam Cohen	F.4	Mathematical Institute, L2 (week 1), L1 (weeks 2–8),
Functional Analysis	Prof. Charles Batty	T.5–6:30	Mathematical Institute, C1
Geometry and Analysis	Prof Andrew Dancer and Prof Frances Kirwan	M.2.15–3:30	Mathematical Institute, L5
Geophysical and Non-linear Fluid Dynamics	Prof. Peter Read and Prof. Irene Moroz	T.2:15	Atmospheric Physics
Homological Theory	Prof. Kobi Kremnitzer	W.10–12	Mathematical Institute, L4
Industrial and Applied Mathematics	Dr Robert Van Gorder	Th.4–5.30	Mathematical Institute, L3 (weeks 1–6), L1 (weeks 7–8)
Junior Algebra and Representation Theory	Mr Kieran Calvert	F.10 (odd weeks)	Mathematical Institute, N3.12
Junior Applied Mathematics	Mr Mark Gilbert	T.12.45–2:00 (even weeks)	Mathematical Institute, C5
Junior Analytic Topology	Mr Robert Leek	Th. 1.30-3.00	Mathematical Institute, C5
Junior Computational Algebra and Topology Seminar	Ms Barbara Mahler, Ms Nina Otter, and Ms Bernadette Stolz	T.1	Mathematical Institute, C1
Junior Geometry and Topology Seminar	Mr Alejandro Betancourt De La Parra	Th.4–5:30	Mathematical Institute, C5
Junior Logic	Mr Sebastian Eterovic	T.2.30	Mathematical Institute, C4
Junior Number Theory	Prof. Ben Green and Prof. Minhyong Kim	M.4–6	Mathematical Institute, C3
Junior Topology and Group Theory	Mr Nicolaus Heuer	W.4–5:30	Mathematical Institute, C5
Kinderseminar	Mr Kieran Calvert	W.11–12.30	Mathematical Institute, N3.12
Logic	Prof. Jonathan Pila	Th.5.30 (week 1) [L6] T.4 [L3 (weeks 2–7), C2 (week 8)]	Mathematical Institute, L6, L3, C2
Mathematical Behavioural Finance		W.3	Oxford-Man Institute

Mathematical and Computational Biology	Prof. Philip Maini, Prof. Ruth Baker, Prof. Eamonn Gaffney, Dr Peter Minary and Dr David Gavaghan	F.2	Mathematical Institute, L3
Mathematical and Computational Finance	Prof. Jan Obloj	Th.4-5.30	Mathematical Institute, L4
Mathematical Finance Internal Seminar	Prof. Samuel Cohen	F.1	Mathematical Institute, L6
Mathematical Geoscience	Prof. Andrew Fowler & Prof. Ian Hewitt	F.2–3.30 (even weeks)	Mathematical Institute, C3
Networks Journal Club	Mr Fabian Ying	Th.12–1.30 (weeks 1–8) Th. 12-1 (weeks 9–10)	Mathematical Institute, C1 (weeks 1–8, 10), C2 (week 9)
Nonlinear PDE	Prof. Gui-Qiang Chen	Th.3.30–5.30	Mathematical Institute, C3
Number Theory	Prof. Ben Green and Prof. Sir Andrew Wiles	Th.4	Mathematical Institute, L6
Numerical Analysis Internal Seminar	Prof. Endre Süli and Dr Alberto Paganini	T.2	Mathematical Institute, L5 (weeks 1–7), L3 (week 8)
Oxford Advanced Seminar on Informatic Structures	Dr Mehrnoosh Sadrzadeh	F.2	Department of Computer Science
Partial Differential Equations Seminar	Prof. Luc Nguyen	M.4	Mathematical Institute, L4
PDE CDT lunchtime seminar	Dr Angkana Ruland	Th.12	Mathematical Institute, L4
Poincare Seminar	Prof. Martin Bridson and Prof. Marc Lackenby	M.12.30–2:00	Mathematical Institute, C2
Probability Workshops	Prof. Alison Etheridge	M.12–1.30	Mathematical Institute, L5
Quantum Field Theory/Relativity	Dr Keith Hannabuss and Dr Florence Tsou	T.12–1:30	Mathematical Institute, L4
Representation Theory	Prof. Kobi Kremnitzer & Prof. Kevin McGerty	Th.2–4	Mathematical Institute, L3
Statistics Applied Probability and Operational Research	Prof. Yee Whye Teh	Th.2:15	Department of Statistics
Statistics Graduate Seminar	Prof. Geoff Nicholls	Th.3.45(weeks 1 and 3–6)	Department of Statistics
Statistics Graduate Student Presentations	Prof. Geoff Nicholls	Th.3 (week 7)	Department of Statistics
Stochastic Analysis	Prof. Terry Lyons	M. 2.15–3.30 M. 3.45-5	Mathematical Institute, L3
Stochastic Differential Games Reading Seminar	Prof. Samuel Cohen	Time t.b.c on a weekly basis	Mathematical Institute
String Theory	Prof. Philip Candelas and Prof. Xenia de la Ossa	M.12–2	Mathematical Institute, L3
String Theory Discussion Seminar	Dr Tomasz Lukowski	Th. 12-2	Mathematical Institute, L6 (weeks 1–2, 4–6), L2 (weeks 3, 7-8)
Topology Seminar	Prof. Cornelia Drutu, Prof. Andras Juhasz, Prof. Ulrike Tillmann	M.3:30–5 (weeks 0-8)	Mathematical Institute, L5 (week 0), L6 (weeks 1–8)
Wolfson Centre for Mathematical Biology Journal Club	Prof. Philip Maini	M.12–1:30	Mathematical Institute, L6
GRADUATE WORKSHOPS			
WORKSHOPS			
Industrial and Interdisciplinary Workshops	Prof. Chris Breward	F.10–1	Mathematical Institute, L3
ADVANCED CLASSES			
Algebra	Dr Aditi Kar	T.4–5.30	Mathematical Institute, C5
Iterated Integrals	Prof. Francis Brown	F.10	Mathematical Institute, C3
Logic	Prof Ehud Hrushovski	Th.11–12:30	Mathematical Institute, C5

Representation Theory	Dr Lisa Lamberti	Th.10	Mathematical Institute, C5
Topology	Prof. Ulrike Tillmann	M.11-12.30	Mathematical Institute, C2
GRADUATE LECTURES			
Galois representations and automorphic forms	Prof Andrew Wiles	W.3-4.30 (weeks 2-8)	Mathematical Institute, C3
Introduction to Profinite Groups	Prof Dan Segal	T.4-6	Mathematical Institute, C3
Introduction to Rigid Analytic Geometry	Prof. Damian Rössler	T.Th.9	Mathematical Institute, C1
Counting Binary Forms: An Introduction to the Methods of Manjul Bhargava	Dr Stanley Xiao	M.W.2	Mathematical Institute, C1
Mixed Modular Forms	Prof. Francis Brown	F.10-12	Mathematical Institute, C3
The ASD Equations in Low Dimensions	Dr Constantin Teleman	T.10-12	Mathematical Institute, C3
Vertex Operator Algebras	Prof. Christopher Beem	F.2.30-4 (weeks 2-4, 6-8)	Mathematical Institute, C2
TAUGHT COURSE CENTRE			
<p>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 http://tcc.maths.ox.ac.uk/</p>			
EPSRC CDT in Industrially Focused Mathematical Modelling			
Mathematical Modelling	Prof Chris Breward	M.T.W.Th.F.9-1 (weeks 1-2)	Mathematical Institute, C6
Scientific Computing	Dr Andrew Thompson	M.T.W.Th.F.2-5.30 (weeks 1-2)	Mathematical Institute, C6
Modelling, analysis and computation of continuous real world problems	Prof Colin Please, Dr Ricardo Ruiz Baier, Prof Coralia Cartis	M.T.W.Th.9-5.30 (weeks 3-6)	Mathematical Institute, C6
Modelling, analysis and computation of discrete real world problems	Dr Christian Bick, Prof Jared Tanner, Dr Andrew Thompson	M.T.W.Th.9-5.30 (weeks 7-9)	Mathematical Institute, C6
EPSRC CDT in Partial Differential Equations.			
Foundation Modules			
Measure Theory and Probability	Prof Jan Obloj	T.11-1 and 2-4 (week -1) W.10-12 and 3-5 (week -1)	Mathematical Institute, C5
Function Spaces and Distribution Theory	Prof Melanie Rupflin	Th.10-12 and 2-4 (week -1) M.10-12 (week 0) T.2-4 (week 0)	Mathematical Institute, C5
Introduction to Partial Differential Equations	Prof Gui-Qiang Chen	F.11:30-1:30 (week 0)[C5] M. 10-12 (week 1) [C3] T. 2-4 (week 1) [C5] W. 10-12 (week 1) [C1]	Mathematical Institute, C1, C3, C5
Introduction to Differential Geometry	Prof Dominic Joyce	Th.1:45-4 (week 0) [C5] F.9-11:15 (week 0) [C5] M. 1:45-4 (week 1) [C4] W. 1:45-4 (week 1) [C4] Th. 1:45-4 (week 1) [C4]	Mathematical Institute, C4, C5

Survey Courses			
Nonlinear Analysis and Applications	Prof Melanie Ruplin	T. 4 (weeks 3-5) F. 9-11 (weeks 3-5)	Mathematical Institute, C1
Stochastic Analysis and Partial Differential Equations	Prof Jan Obloj	T. 10 (weeks 3-5)[C2] W. 4 (weeks 4-6)[L6] Th. 11 (weeks 4-6)[C2]	Mathematical Institute, C2, L6
Scientific Computing and Numerical Analysis	Prof Endre Suli	M. 12 (weeks 6-8) F. 10-12 (weeks 6-8)	Mathematical Institute, C1
Geometric Analysis and Partial Differential Equations	Prof Luc Nguyen	M. 2 (weeks 6-8), C3 W. 9-11 (weeks 6-8), C1	Mathematical Institute, C1, C3
Analysis of PDEs	Prof Yves Capdeboscq	M. 9-11 [C2 weeks 2-8, C5 week 9]	Mathematical Institute, C2, C5
M.Sc IN MATHEMATICAL AND COMPUTATIONAL FINANCE			
Financial Computing with C++	Dr Greg Gyurko	W. 12 (week 1) [L6] W. 2 [L6 weeks 1-7, L3 week 8]	Mathematical Institute, L6, L3
Financial Derivatives 1	Dr David Promel	M. 11 [L6] Th. 11 [L4]	Mathematical Institute, L6, L4
Numerical Methods – Monte Carlo Methods [weeks 1-4]	Prof Mike Giles	M. 13:30 (weeks 1–4)[L1]] W. 11 (weeks 1-3) [L6] T. 11 (week 4) [L6]	Mathematical Institute, L1, L6
Numerical Methods – Finite Difference Methods[weeks 5-8]	Prof Christoph Reisinger	M. 13:30 (weeks 5-8) [L1] W. 11 (week 5) [L6] M. 10 (weeks 6-7) [L6] W. 11 (week 8) [L2]	Mathematical Institute, L1, L2 L5
Statistics and Financial Data Analysis	Prof Sam Cohen	T. 10 (week 8 only) [L6] W. 10 (weeks 1-7) [L6] F. 11 [L6 weeks 1-7, L1 week 8]	Mathematical Institute, L6, L1
Stochastic Calculus	Prof Ben Hambly	M.9 (week 8 only) [L6] Th. 10 (weeks 1-7) [L5] F. 10 (weeks 1-7) [L6] F. 9 (week 8 only) [L6]	Mathematical Institute, L6, L5
M.Sc IN MATHEMATICAL AND THEORETICAL PHYSICS – T.B.C.			
Quantum Field Theory	Dr Tomasz Lukowski	W.3 [L2] Th.2–4[L1]	Mathematical Institute, L1, L2
Statistical Mechanics	Prof. Andrew Fowler	M.2, T.11	Mathematical Institute, C2
Advanced Quantum Theory	Prof. Fabian Essler	M.9 (weeks 1–7) W.10 (weeks 1–7) Th.9 (weeks 1–6)	Department of Physics, Dennis Sciamia Lecture Theatre
Nonequilibrium Statistical Physics	Prof. Ramin Golestanian	T.B.C.	Department of Physics, Dennis Sciamia Lecture Theatre
Topological Quantum Theory	Prof. Steve Simon	T.B.C.	Department of Physics, Fisher Room
Kinetic Theory	Dr Paul Dellar, Prof. Alex Schekochihin, Prof. James Binney	M.10 (weeks 1, 4–8) M.4–6 (weeks 1–8) T.2 (weeks 1, 3) T.2–4 (week 8)	Department of Physics, Fisher Room
Radiative Processes and High Energy Astrophysics	Prof. Garret Cotter	M.W.F.12	Department of Physics, Dennis Sciamia Lecture Theatre
General Relativity I	Dr Andreas Braun	W.5 [L5 (weeks 1–7), L3 (week 8)] F.5 [L4]	Mathematical Institute, L4, L5, L3

Perturbation Methods	Prof. Eamonn Gaffney	M. 3 [L4] W. 2 [L2]	Mathematical Institute, L4, L2
Numerical Linear Algebra	Prof. Andy Wathen	T.4 [L3 (weeks 1–5, 7–8), L1 (week 6)] Th.5 [L2]	Mathematical Institute, L1, L2, L3
Groups and Representations	Prof. Andre Lukas	T.B.C.	Department of Physics, Fisher Room
Algebraic Topology	Prof Christopher Douglas	T.12 [L5 (weeks 1–7), L6 (week 8)] W.12 [L4]	Mathematical Institute
Algebraic Geometry	Prof Alexander Ritter	F.11–1	Mathematical Institute, L5 (weeks 1–7), L6 (week 8)
Differentiable Geometry (Manifolds)	Prof Dominic Joyce	M.12 [L4] Th.10 [C2]	Mathematical Institute, L4, C2
M.Sc IN MATHEMATICAL MODELLING AND SCIENTIFIC COMPUTING[]			
CORE			
A1 Supplementary Applied Mathematics	Prof. Andreas Muench	T.3	Mathematical Institute, L3.
A1 Applied PDEs	Prof. Derek Moulton	M.10 W.10	Mathematical Institute, L3
B1 Numerical Solution of Differential Equations I	Dr Alberto Paganini.	M.9 [L2] F.11 [L4]	Mathematical Institute, L2, L4
B1 Numerical Linear Algebra	Prof. Andy Wathen	T.4 [L3 (weeks 1–5, 7–8), L1 (week 6)] Th.5 [L2]	Mathematical Institute, L1, L2, L3
Mathematical Modelling	Prof. Philip Maini	T.2 [L3 (weeks 1–7), L1 (week 8)] Th. 2–4 [L6]	Mathematical Institute, L3, L1, L6
Additional Skills	Dr Kathryn Gillow	Th. 10–12	Mathematical Institute, L6
Practical Numerical Analysis	Dr Alberto Paganini.	M.4 [L5. (weeks 1-2), L1 (weeks 3–8)] Th.4 [L5 (weeks 1–6), L3 (weeks 7-8)]	Mathematical Institute, L1, L5, L3
SPECIAL TOPICS[]			
Integer Programming	Prof. Raphael Hauser	T. 10 Th.12	Mathematical Institute, L3
Mathematical Geoscience	Prof. Ian Hewitt	T.F.9	Mathematical Institute, L4
Further Mathematical Biology	Prof. Helen Byrne	W.11 [L3] W.4 [L3] (week 2 only) F.10 [L2] (weeks 28)	Mathematical Institute, L3, L2
Mathematical Physiology	Prof. Sarah Waters	W.12 [L3] F.12 [L4]	Mathematical Institute, L3, L4
Perturbation Methods	Prof. Eamonn Gaffney	M. 3 [L4] W. 2 [L2]	Mathematical Institute, L4, L2
Solid Mechanics	Prof. Alain Goriely	F.2–4	Mathematical Institute, L4
Statistical Mechanics	Prof. Andrew Fowler	M.2, T.11	Mathematical Institute, C2
Stochastic Differential Equations	Prof. Harald Oberhauser	W.5 [L4] F.4 [L3]	Mathematical Institute, L4, L3
Topics in Fluid Mechanics	Prof. Andreas Muench	T. 1, T.5.	Mathematical Institute, L2
Viscous Flow	Prof. Andrew Fowler	M.11	Mathematical Institute, L2

		T.12	
Approximation of Functions	Prof. Gunnar Martinsson	W.9 [L4] Th.9 [L3]	Mathematical Institute, L4, L3
M.Sc IN MATHEMATICS AND THE FOUNDATIONS OF COMPUTER SCIENCE			
An Introduction to LaTeX	Dr Peter Neumann	Th. 11 (weeks 2-4)	Mathematical Institute, L5
Section A: Mathematical Foundations			
<i>Schedule I</i>			
Algebraic Topology	Prof Christopher Douglas	T.12 [L5 (weeks 1-7), L6 (week 8)] W.12 [L4]	Mathematical Institute, L5, L6, L4
Analytic Topology	Dr Rolf Suabedissen	T.10 [L4] W.10 [weeks 1–7: L5, week 8 :L6]	Mathematical Institute, L4, L5, L6
Model Theory	Prof. Ehud Hrushovski	M.2 [L6] F.2 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, L6, L5
Introduction to Representation Theory	Prof. Dan Ciubotaru	M. 3 [L2] F. 3 [L2 weeks 1-6, 8] [L1 week 7]	Mathematical Institute, L2, L1
Lie Algebras	Prof. Nikolay Nikolov	T.11[L4] Th.12 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, L4, L5, L6
Topology and Groups	Prof. Marc Lackenby	T.3 Th.3	Mathematical Institute, L2
<i>Schedule II</i>			
Algebraic Geometry	Prof Alexander Ritter	F.11–1	Mathematical Institute, L5 (weeks 1–7), L6 (week 8)
Homological Algebra	Dr Andre Henriques	T.2 [C2] Th.2 [C1]	Mathematical Institute, C1, C2
Section B: Applicable Theories			
<i>Schedule I</i>			
Applied Probability	Prof. Paul Chleboun	T.W.9	Department of Statistics
Categories Proofs and Processes	Prof. Samson Abramsky	Th.5 (weeks 1-8) F.5 (weeks 1-4) F.4 (weeks 1-8)	Department of Computer Science, LTB
Communication Theory	Prof. Harald Oberhauser	T.4 Th.4	Mathematical Institute, L2
Computer-Aided Formal Verification	Prof. Alessandro Abate	W.11 Th.2	Department of Computer Science, LTA
Foundations of Computer Science	Prof. Paul Goldberg	M.W.5	Department of Computer Science, LTA
Graph Theory	Prof. Oliver Riordan	W.12 [L2] Th.10 [L3]	Mathematical Institute, L2, L3
Introduction to Cryptology	Dr Ali El Kaafarani	T.2, Th.11	Mathematical Institute, C1
<i>Schedule II</i>			
Automata, Logic and Games	Prof. Luc Ong	Th.F.12 F.11	Department of Computer Science, LTB
Combinatorics	Dr Michal Przykucki	M.9 [L3] F. 10 [L4]	Mathematical Institute, L3, L4
Computational Game Theory	Prof. Michael Wooldridge Prof. Edith Elkind	T.3 T.4 W.12	Department of Computer Science, LTA
Elliptic Curves	Prof. Victor Flynn	M. 4 [C2 (weeks 1-2), L5 (weeks 3– 8)]	Mathematical Institute, C2, L5, L6

		W. 11 [L5 (weeks 1-7), L6 (week 8)]	
MATHEMATICS			
Prelims			
Introduction to University Mathematics	Prof. Alan Lauder	M.9, T.W.Th.F.4 (week 1) M.T.W.4 (week 2)	Mathematical Institute, L1
Introduction to Complex Numbers	Dr Peter Neumann	M.10, W.9 (week 1)	Mathematical Institute, L1
Linear Algebra I	Dr Peter Neumann	M.10 (weeks 2–8) W.9 (weeks 2-8)	Mathematical Institute, L1
Geometry	Dr Richard Earl	Th.10 (weeks 1-8) F.10 (weeks 2-8)	Mathematical Institute, L1
Analysis I	Prof. Frances Kirwan	T.10 (weeks 1–8) W.10 (weeks 2–8)	Mathematical Institute, L1
Introductory Calculus	Dr Cath Wilkins	M.4 (week 1 only) M.9 (weeks 2–8) T.9 (weeks 1–8)	Mathematical Institute, L1
Probability	T.B.C.	Th.F.9	Mathematical Institute, L1
Computational Mathematics	Dr Andrew Thompson	F.11 (weeks 2 and 5)	Mathematical Institute, L1
Part A			
Differential Equations 1	Prof. Philip Maini	T.11, Th. 12	Mathematical Institute, L1
Linear Algebra	Prof. Alan Lauder	T.12, W.11	Mathematical Institute, L1
Metric Spaces and Complex Analysis	Prof. Kevin McGerty	M.11, W.12, Th.11, F.12	Mathematical Institute, L1
Quantum Theory	Dr Andrew Hodges	T.Th.10	Mathematical Institute, L2
Probability	Dr Matthias Winkel	M.10 W.10	Mathematical Institute, L2
Part B			
B1.1 Logic	Prof. Jonathan Pila	Th.9 F.9	Mathematical Institute, L2
B2.1 Introduction to Representation Theory	Prof. Dan Ciubotaru	M.3 [L2] F.3 [L2 weeks 1-6, 8] [L1 week 7]	Mathematical Institute, L2, L1
B3.1 Galois Theory	Dr Giacomo Micheli	M.11 T.12	Mathematical Institute, L3
B3.2 Geometry of Surfaces	Prof. Alexander Ritter	Th.11 [L3] F.2 [L2 weeks 1-6, 8] [L1 week 7]	Mathematical Institute, L3, L1
B3.5 Topology and Groups	Prof. Marc Lackenby	T.3 Th.3	Mathematical Institute, L2
B4.1 Functional Analysis I	Prof. Hilary Priestley	W.2 [L4] Th.2 [L5 weeks 1-7] [L2 week 8]	Mathematical Institute, L4, L5, L3
B4.3 Distribution Theory and Fourier Analysis: An Introduction	Prof. Jan Kristensen	T. 2 [L2] W. 4 [L4]	Mathematical Institute, L2, L4
B5.2 Applied PDEs	Prof. Derek Moulton	M.10 W.10	Mathematical Institute, L3
B5.3 Viscous Flow	Prof. Andrew Fowler	M.11 T.12	Mathematical Institute, L2
B5.5 Further Mathematical Biology	Prof. Helen Byrne	W.11 [L3] W.4 [L3] (week 2 only) F.10 [L2] (weeks 2–8)	Mathematical Institute, L3, L2

B6.1 Numerical Solution of Differential Equations I	Dr Alberto Paganini.	M.9 [L2] F.11 [L4]	Mathematical Institute, L2, L4
B6.3 Integer Programming	Prof. Raphael Hauser	T. 10 Th.12	Mathematical Institute, L3
B7.1 Classical Mechanics	Prof. James Sparks	M.4 [L2] (weeks 1–3, 5–8) Th.1 [L4] (weeks 2 and 3) F.4 [L4] (weeks 1–3, 5–8)	Mathematical Institute, L2, L4
B7.2 Electromagnetism	Prof. Xenia de la Ossa	T.11 [L3] W.3 [L3 weeks 1-5, 7-8] [L5 week 6]	Mathematical Institute, L3, L5
B8.1 Martingales Through Measure Theory	Prof. Zhongmin Qian	M.12 [L1] F.12 [L2]	Mathematical Institute, L1, L2
B8.4 Communication Theory	Prof. Harald Oberhauser	T.4 Th.4	Mathematical Institute, L2
B8.5 Graph Theory	Prof. Oliver Riordan	W.12 [L2] Th.10 [L3]	Mathematical Institute, L2, L3
SB3a Applied Probability	Prof. Paul Chleboun	T.W.9	Department of Statistics, LG.01
BO1.1 History of Mathematics	Dr Christopher Hollings	M.3–5	Mathematical Institute, C1
BSP: Structured Projects	Dr Cath Wilkins	M.3 (week 1 only)	Mathematical Institute, C3
SB1 Applied Statistics	Dr Neil Laws and Dr Jennifer Rogers	Lectures: M.3 (weeks 1-7) F.9 (weeks 1-6) Practical Classes: W.2–3.30pm (weeks 3 and 5) Th.13:30-15 (week 8)	Department of Statistics
SB2a Foundations of Statistical Inference	Prof. Judith Rousseau	T.Th.3	Department of Statistics
SB4a Actuarial Science I	Dr Matthias Winkel	T.11, Th.9	Department of Statistics
BN1.1 Mathematics Education	Mr Nick Andrews	F.10–12	Mathematical Institute, C2
101 Early Modern Philosophy: Descartes	Prof. Paul Lodge	F.10	Examination Schools
101 Early Modern Philosophy: Hume	Prof. Peter Millican	T.10	Examination Schools
102 Knowledge and Reality: Metaphysics	Prof. Ralf Bader	W.10	Examination Schools
122 Philosophy of Mathematics	Prof. Alex Paseau	M.2	Rad. Hum.
*Dissertation: 'Presenting a Thesis'	Dr Richard Earl	Th. 11 (week 7 only)	Mathematical Institute, L5
*An Introduction to LaTeX	Dr Peter Neumann	Th. 11 (weeks 2-4)	Mathematical Institute. L5
An Introduction to Intercollegiate Classes	Dr Richard Earl, Prof. Peter Jeavons, Dr Neil Laws, Dr Vicky Neale	T.5 (week 1)	Mathematical Institute, L1
Part C			
C1.1 Model Theory	Prof Ehud Hrushovski	M.2 [L6] F.2 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, L6, L5
C1.3 Analytic Topology	Dr Rolf Suabedissen	T.10 [L4] W.10 [L5 (weeks 1–7), L6 (week 8)]	Mathematical Institute, L4, L5, L6
C2.1 Lie Algebras	Prof. Nikolay Nikolov	T.11[L4] Th.12 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, L4, L5, L6
C2.2 Homological Algebra	Dr Andre Henriques	T.2 [C2]	Mathematical Institute, C1, C2

		Th.2 [C1]	
C2.7 Category Theory	Prof. Kobi Kremnitzer	Th.9 [L5 (weeks 1–7), L6 (week 8)] F.9 [L3]	Mathematical Institute, L4, C1, L3
C3.1 Algebraic Topology	Prof. Christopher Douglas	T.12 [L5 (weeks 1-7), L6 (week 8)] W.12 [L4]	Mathematical Institute, L5, L6, L4
C3.3 Differentiable Manifolds	Prof. Dominic Joyce	M.12 [L4] Th.10 [C2]	Mathematical Institute, L4, C2
C3.4 Algebraic Geometry	Prof. Alexander Ritter	F.11–1 L5 (weeks 1–7), L6 (week 8)	Mathematical Institute, L5, L6
C3.7 Elliptic Curves	Prof. Victor Flynn	M. 4 [C2 (weeks 1–2), L5 (weeks 3–8)] W. 11 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, C2, L5, L6
C4.1 Functional Analysis	Dr David Seifert	M.11 [L5] W.2 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, L5, L6
C4.3 Functional Analytic Methods for PDEs	Prof. Gregory Seregin	M. 10 [C1] W. 10 [C5]	Mathematical Institute, C1, C5
C4.8 Complex Analysis: Conformal Maps and Geometry	Prof. Dmitry Belyaev	T. 3 [C2] (weeks 1–2, 4–8) Th.3 [C1] (weeks 1–8) Th.4 [C1] (week 3 only)	Mathematical Institute, C2, C1
C5.1 Solid Mechanics	Prof. Alain Goriely	F.2–4	Mathematical Institute, L4
C5.3 Statistical Mechanics	Prof. Andrew Fowler	M.2, T.11	Mathematical Institute, C2
C5.5 Perturbation Methods	Prof. Eamonn Gaffney	M. 3 [L4] W. 2 [L2]	Mathematical Institute, L4, L2
C5.7 Topics in Fluid Mechanics	Prof. Andreas Muench	T. 1, T.5	Mathematical Institute, L2
C5.11 Mathematical Geoscience	Prof. Ian Hewitt	T. 9 F.9	Mathematical Institute, L4
C5.12 Mathematical Physiology	Prof. Sarah Waters	W.12 [L3] F.12 [L4]	Mathematical Institute, L3, L4
C6.1 Numerical Linear Algebra	Prof. Andy Wathen	T.4 [L3 (weeks 1–5, 7–8), L1 (week 6)] Th.5 [L2]	Mathematical Institute, L1, L2, L3
C6.3 Approximation of Functions	Prof. Gunnar Martinsson	W.9 [L4] Th.9 [L3]	Mathematical Institute, L4, L3
C7.1 Theoretical Physics	Prof. Fabian Essler	M.9 W.10 Th.9	Department of Physics, Dennis Sciama Lecture Theatre
C7.5 General Relativity I	Dr Andreas Braun	W.5 [L5 (weeks 1–7), L3 (week 8)] F.5 [L4]	Mathematical Institute, L4, L5, L3
C8.1 Stochastic Differential Equations	Prof. Harald Oberhauser	W.5 [L4] F.4 [L3]	Mathematical Institute, L4, L3,
C8.3 Combinatorics	Dr Michal Przykucki	M.9 [L3] F. 10 [L4]	Mathematical Institute, L3, L4
CCS1 Categories Proofs and Processes	Prof. Samson Abramsky	Th.5 (weeks 1-8) F.5 (weeks 1-4) F.4 (weeks 1-8)	Department of Computer Science
CCS3 Automata, Logic and Games	Prof. Luc Ong	Th.F.12 F.11	Department of Computer Science
SC1 Stochastic Models in	Prof. Simon Myers	M.12	Department of Statistics

Mathematical Genetics		Th.4	
SC2 Probability and Statistics for Network Analysis	Prof. Gesine Reinert	M.4 (weeks 1–7) T.2 (weeks 1–7) Practicals: W.3-5 (weeks 2 and 6)	Department of Statistics
SC6 Graphical Models	Prof. Robin Evans	W.11 Th.12	Department of Statistics
*Dissertation: ‘ <i>Presenting a Thesis</i> ’	Dr Richard Earl	Th. 11 (week 7 only)	Mathematical Institute, L5
*An Introduction to LaTeX	Dr Peter Neumann	Th. 11 (weeks 2-4)	Mathematical Institute, L5
*These lectures will be useful to students offering an Extended Essay or Dissertation.			
“Extra” Part C subjects			
[Note: No “Extra” Part C subjects are planned for MT 2017.]			
COMPUTER SCIENCE			
Prelims			
Introduction to University Mathematics	Prof. Alan Lauder	M.9, T.W.Th.F.4 (week 1) M.T.W.4 (week 2)	Mathematical Institute, L1
CS1 Functional Programming	Dr Geriant Jones	T.Th.11	Department of Computer Science, LTB
CS3 Discrete Mathematics	Prof. Jonathan Barrett	W.F.10	Department of Computer Science, LTB
CS3 Linear Algebra	Prof. Peter Minary Prof. Jonathan Whiteley	M.10 T.9 W.9	Department of Computer Science, LTB
Probability	Prof. James Martin	Th.F.9	Mathematical Institute, L1
MATHEMATICS AND COMPUTER SCIENCE			
Prelims			
CS1 Functional Programming	Dr Geriant Jones	T.Th.11	Department of Computer Science, LTB
Introduction to University Mathematics	Prof. Alan Lauder	M.9, T.W.Th.F.4 (week 1) M.T.W.4 (week 2)	Mathematical Institute, L1
Introduction to Complex Numbers	Dr Peter Neumann	M.10, W.9 (week 1)	Mathematical Institute, L1
Analysis I	Prof. Frances Kirwan	T.10 (weeks 1–8) W.10 (weeks 2–8)	Mathematical Institute, L1
Linear Algebra I	Dr Peter Neumann	M.10 (weeks 2–8) W.9 (weeks 2-8)	Mathematical Institute, L1
Probability	Prof. James Martin	Th.F.9	Mathematical Institute, L1
COMPUTER SCIENCE			
Part A			
Core			
Models of Computation	Prof. Tom Melham	M.12 T.11	Department of Computer Science, LTA
Compilers	Prof. Mike Spivey	W.9 F.11	Department of Computer Science, LTA
Schedule S1			
Computer Security	Prof. Bill. Roscoe	T.5 (weeks 1-4, 6-8) F.3 (weeks 1-4, 6-8) F.5 (weeks 6 and 7)	Department of Computer Science, LTA
Computer-Aided Formal Verification	Prof. Alessandro Abate	W.11 Th.2	Department of Computer Science, LTA
Databases	Dr Tom Furche	M.9 M.10	Department of Computer

	Dr Milos Nikolic		Science, LTA
Intelligent Systems	Vicente Grau	M.Th.3	Department of Computer Science, LTA
Geometric Modelling	Dr Irina Voiculescu	T.F.12 (weeks 1-8) W.2 (weeks 1-4)	Department of Computer Science, LTA
Machine Learning	Dr Varun Kanade Dr Christoph Haase	M.W.4 (weeks 1-8) F.10 (weeks 1-4)	Department of Computer Science, LTA
Principles of Programming Languages	Prof. Sam Staton	M.2 W.3	Department of Computer Science, LTA
MATHEMATICS & COMPUTER SCIENCE			
Part A			
Core			
Models of Computation	Prof. Tom Melham	M.12 T.11	Department of Computer Science, LTA
Schedule S1			
Compilers	Prof. Mike Spivey	W.9 F.11	Department of Computer Science, LTA
Computer Security	Prof. Bill. Roscoe	T.5 (weeks 1-4, 6-8) F.3 (weeks 1-4, 6-8) F.5 (weeks 6 and 7)	Department of Computer Science, LTA
Computer-Aided Formal Verification	Prof. Alessandro Abate	W.11 Th.2	Department of Computer Science, LTA
Databases	Dr Tom Furche Dr Milos Nikolic	M.9 M.10	Department of Computer Science, LTA
Geometric Modelling	Dr Irina Voiculescu	T.F.12 (weeks 1-8) W.2 (weeks 1-4)	Department of Computer Science, LTA
Intelligent Systems	Vicente Grau	M.Th.3	Department of Computer Science, LTA
Machine Learning	Dr Varun Kanade Dr Christoph Haase	M.W.4 (weeks 1-8) F.10 (weeks 1-4)	Department of Computer Science, LTA
Principles of Programming Languages	Prof. Sam Staton	M.2 W.3	Department of Computer Science, LTA
[In addition, the lectures under Mathematics Part A, except Differential Equations I, are applicable.]			
COMPUTER SCIENCE, MATHEMATICS & COMPUTER SCIENCE			
Part B			
An Introduction to Intercollegiate Classes	Dr Richard Earl, Prof. Peter Jeavons, Dr Neil Laws, Dr Vicky Neale	T.5 (week 1)	Mathematical Institute, L1
Schedule B1			
Databases	Dr Tom Furche Dr Milos Nikolic	M.9 M.10	Department of Computer Science, LTA
Intelligent Systems	Vicente Grau	M.Th.3	Department of Computer Science, LTA
Compilers	Prof. Mike Spivey	W.9 F.11	Department of Computer Science, LTA
Schedule B2			
Computer Security	Prof. Bill. Roscoe	T.5 (weeks 1-4, 6-8) F.3 (weeks 1-4, 6-8) F.5 (weeks 6 and 7)	Department of Computer Science, LTA

Computer Aided Formal Verification	Prof. Alessandro Abate	W.11 Th.2	Department of Computer Science, LTA
Machine Learning	Dr Varun Kanade Dr Christoph Haase	M.W.4 (weeks 1-8) F.10 (weeks 1-4)	Department of Computer Science, LTA
Principles of Programming Languages	Prof. Sam Staton	M.2 W.3	Department of Computer Science, LTA
Geometric Modelling	Dr Irina Voiculescu	T.F.12 (weeks 1-8) W.2 (weeks 1-4)	Department of Computer Science, LTA
Schedule B3			
Lectures under Mathematics Part B: B1, B2, B3.1, B3.4, B3.5, B4.1, B4.2, B5.1, B5.2, B8.4, B8.5, BS3, are applicable. If you wish to offer an additional Maths Part B subject under this Schedule, please contact the Academic Administrator, Department of Computer Science, for details.			
Part C			
Schedule C1			
Automata, Logic and Games	Prof. Luc Ong	Th.F.12 F.11	Department of Computer Science, LTB
Categories Proofs and Processes	Prof. Samson Abramsky	Th.5 (weeks 1-8) F.5 (weeks 1-4) F.4 (weeks 1-8)	Department of Computer Science, LTB
Computational Game Theory	Prof. Michael Wooldridge Prof. Edith Elkind	T.3 T.4 W.12	Department of Computer Science, LTA
Concurrent Algorithms and Data Structures	Prof. Gavin Lowe	T.W.Th.10 (weeks 1-7)	Department of Computer Science, LTA
Probabilistic Model Checking	Dr Morteza Lahijanian	M.T.12 (weeks 1-8) F.2 (weeks 1-4)	Department of Computer Science, LTB
Physically Based Rendering	Dr Stefano Gogioso Dr Jassim Happa	W.2 Th.4	Department of Computer Science, Tony Hoare, RHB
MATHEMATICS AND PHILOSOPHY			
Prelims			
Mathematics:			
Introduction to University Mathematics	Prof. Alan Lauder	M.9 T.W.Th.F.4 (week 1) M.T.W.4 (week 2)	Mathematical Institute, L1
Introduction to Complex Numbers	Dr Peter Neumann	M.10, W.9 (week 1)	Mathematical Institute, L1
Linear Algebra I	Dr Peter Neumann	M.10 (weeks 2-8) W.9 (weeks 2-8)	Mathematical Institute, L1
Probability	Prof. James Martin	M.10 (weeks 2-8) W.9 (weeks 2-8)	Mathematical Institute, L1
Analysis I	Prof. Frances Kirwan	T.10 (weeks 1-8) W.10 (weeks 2-8)	Mathematical Institute, L1
Introductory Calculus	Dr Cath Wilkins	M.4 (week 1 only) M.9 (weeks 2-8) T.9 (weeks 1-8)	Mathematical Institute, L1
Philosophy:			
General Philosophy (route A)	Prof. Peter Millican	W.12	Examination Schools
Introduction to Logic	Prof. Volker Halbach	M.12	Examination Schools
Part A Mathematics:			

Linear Algebra	Prof. Alan Lauder	T.12, W.11	Mathematical Institute, L1
Metric Spaces and Complex Analysis	Prof. Kevin McGerty	M.11, W.12, Th.11, F.12	Mathematical Institute, L1
[These lectures are for compulsory subjects]			
Part B Mathematics			
B1.1 Logic	Prof. Jonathan Pila	Th.9 F.9	Mathematical Institute, L2
An Introduction to Intercollegiate Classes	Dr Richard Earl, Prof. Peter Jeavons, Dr Neil Laws, Dr Vicky Neale	T.5 (week 1)	Mathematical Institute, L1
[These lectures are for the compulsory subject "Foundations". Other courses listed under mathematics Part B can be taken: B2, B3, B4.1, B4.2, B4.3, B8.1, B8.4, B8.5, BO1.1, BN1.1, SB3a, Computer Aided Formal Verification.]			
Part B Philosophy:			
101 Early Modern Philosophy: Descartes	Prof. Paul Lodge	F.10	Examination Schools
101 Early Modern Philosophy: Hume	Prof. Peter Millican	T.10	Examination Schools
102 Knowledge and Reality: Metaphysics	Prof. Ralf Bader	W.10	Examination Schools
122 Philosophy of Mathematics	Prof. Alex Paseau	M.2	Rad. Hum.
[For further Philosophy lectures, please consult the Philosophy lecture list]			
Part C Mathematics: Logic			
C1.1 Model Theory	Prof Ehud Hrushovski	M.2 [L6] F.2 [L5 (weeks 1-7), L6 (week 8)]	Mathematical Institute, L6, L5
C1.3 Analytic Topology	Dr Rolf Suabedissen	T.10 [L4] W.10 [weeks 1-7: L5, week 8 :L6]	Mathematical Institute, L4, L5, L6
[See Philosophy list for Philosophy subjects which may be offered.]			
MATHEMATICS AND STATISTICS			
Prelims			
The lectures above for MATHEMATICS Prelims all apply.			
Part A			
The lectures above for Mathematics Part A, on the compulsory subjects of Algebra, Analysis, and Differential Equations, all apply.			
Department of Statistics Options for Part B and Beyond		M or Th.2 (week 5)	Department of Statistics, LG.01
Part B			
Introduction to SB1 practicals		T. 4 (week 1)	Department of Statistics, LG.02
An Introduction to Intercollegiate Classes	Dr Richard Earl, Prof. Peter Jeavons, Dr Neil Laws, Dr Vicky Neale	T.5 (week 1)	Mathematical Institute, L1
SB1 Applied Statistics	Dr Neil Laws and Dr Jennifer Rogers	Lectures: M.3 (weeks 1-7) F.9 (weeks 1-6) Practical Classes: W.2-3.30pm (weeks 3 and 5) Th.13:30-15 (week 8)	Department of Statistics
SB2a Foundations of Statistical Inference	Prof. Judith Rousseau	T.Th.3	Department of Statistics

SB3a Applied Probability	Prof. Paul Chleboun	T,W,9	Department of Statistics
SB4a Actuarial Science I	Dr Matthias Winkel	T,11, Th,9	Department of Statistics
[Other courses listed under Mathematics Part B can be taken: B1, B2, B3, B4, B5, B6, B7, B8]			
Part C			
Introduction to Part C Project	Dr Laws	W, 12 (week 1)	Department of Statistics, LG.01
Writing a Part C Dissertation	Dr Laws	Th,11 (week 7)	Department of Statistics, LG.01
SC1 Stochastic Models in Mathematical Genetics	Prof. Simon Myers	M,12 Th,4	Department of Statistics
SC2 Probability and Statistics for Network Analysis	Prof. Gesine Reinert	M,4 (weeks 1–7) T,2 (weeks 1–7) Practicals: W,3-5 (weeks 2 and 6)	Department of Statistics
SC6 Graphical Models	Prof. Robin Evans	W,11 Th,12	Department of Statistics
[Other courses under Mathematics Part C can also be taken.]			

FOOTNOTE REFERENCES

- * Lectures begin on the first day possible after the beginning of Full Term (Sunday, 12 October), unless otherwise stated in this column. Events take place every Week of Full Term (Weeks 1–8) unless otherwise stated.