Lectures will be held in the Meeting Rooms (MR) of the Centre for Mathematical Sciences, Clarkson Road, unless otherwise stated.

All Part III and PhD students in the Faculty are able to self-enrol on Part III Moodle courses; they will be sent instructions on how to do so. All other members of the University wishing to access these courses are requested to complete the relevant form in the Part III Guide to Courses.

There will be a meeting on the morning of Wednesday 4 October for those intending to offer courses in Part III. Students should refer to the Notes for New Part III Students for further details.

There is a series of meetings for Part III students on Wednesdays at 4.15pm. Students are invited to refer to the Part III Handbook for more details.

For a personalised version of the timetable, which you can import into your own electronic calendar, please see http://www.timetable.cam.ac.uk.

<table>
<thead>
<tr>
<th>Michaelmas 2023</th>
<th>Lent 2024</th>
<th>Easter 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Relativity</strong></td>
<td><strong>Algebraic Number Theory</strong></td>
<td><strong>Applications of Quantum Field Theory</strong></td>
</tr>
<tr>
<td>Prof. C. M. Warnick</td>
<td>Dr H. Wiersema</td>
<td>Prof. S. A. Hartnoll</td>
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<tr>
<td>M. W. F. 9, MR2</td>
<td>M. W. F. 9, MR3</td>
<td>M. Tu. Th. F. 11, MR3</td>
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<tr>
<td><strong>Advanced Probability</strong></td>
<td><strong>Field Theory in Cosmology</strong></td>
<td><strong>Gravitational Waves and Numerical Relativity</strong></td>
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<tr>
<td>Prof. P. Sousi</td>
<td>Prof. E. Pajer</td>
<td>Prof. U Sperhake</td>
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<tr>
<td>M. W. F. 9, MR3</td>
<td>M. W. F. 9, MR4</td>
<td>M. Tu. Th. F. 12, MR3</td>
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<tr>
<td><strong>Lie Algebras and Their Representations</strong></td>
<td><strong>Stochastic Calculus and Applications</strong></td>
<td></td>
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<tr>
<td>Prof. S. Martin</td>
<td>Prof. J. Miller</td>
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<tr>
<td>M. W. F. 9, MR9</td>
<td>M. W. F. 9, MR5</td>
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<tr>
<td><strong>Biological Physics and Fluid Dynamics</strong></td>
<td><strong>Spectral Computations in Infinite Dimensions and Applications in Data Science</strong></td>
<td></td>
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<tr>
<td>Prof. R. Goldstein</td>
<td>Dr M. Colbrook</td>
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<tr>
<td>M. W. F. 9, MR12</td>
<td>M. W. 9, MR11</td>
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</table>
Combinatorics §
Prof. B. Bollobas
M. W. F. 10, MR3 (sixteen lectures)

Fluid Dynamics of the Solid Earth
Prof. M. G. Worster
M. W. F. 9, MR12

Algebraic Geometry
Dr D. Ranganathan
M. W. F. 10, MR5

Cubulating Spaces and Groups
Dr M. Arenas
M. W. 9, MR13

Quantum Information, Foundations and Gravity
Prof. A. P. A. Kent
W. F. 10, MR9

Quantum Computation
Dr S. Subramanian
W. F. 9, MR14

Slow Viscous Flow §
Prof. J. R. Lister
M. W. F. 10, MR12

Black Holes
Prof. H. S. Reall
M. W. F. 10, MR2

Structure and Evolution of Stars
Prof. C. A. Tout
M. W. F. 10, MR14

Distribution Theory and Applications
Dr A. C. L. Ashton
M. W. 10, MR5

Quantum Field Theory
Dr A. Castro
M. W. F. 11, MR2

Abelian Varieties
Prof. A. J. Scholl
M. W. F. 10, MR9

Algebraic Topology
Prof. I. Smith
M. W. F. 11, MR5

Fluid Dynamics of the Environment
Prof. S. Dalziel, Dr R. Bhagat
M. W. F. 10, MR12

Approximation Theory
Dr A. Shadrin
M. W. 11, MR12

Introduction to Additive Combinatorics
Prof. J. Wolf
M. W. F. 10, MR13 (sixteen lectures)

Model Theory and Non-Classical Logic
Dr J. Siqueira
M. W. F. 11, MR13

Functional Data Analysis
Prof. J. Aston
M. W. 10, MR14
<table>
<thead>
<tr>
<th>Course</th>
<th>Instructor</th>
<th>Days</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astrophysical Fluid Dynamics</td>
<td>Prof. R. Rafikov</td>
<td>M. W. F. 11, MR14</td>
<td>Extra lecture on 26 Oct at 2pm, MR9</td>
<td>No lecture on 1 Nov</td>
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<td>Category Theory</td>
<td>Prof. P. T. Johnstone</td>
<td>M. W. F. 12, MR4</td>
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<td>Modular Forms</td>
<td>Prof. J. A. Thorne</td>
<td>M. W. F. 12, MR5</td>
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<tr>
<td>Modern Statistical Methods ‡</td>
<td>Dr S. Bacallado</td>
<td>M. W. F. 12, MR9</td>
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<tr>
<td>Fluid Dynamics of Climate</td>
<td>Prof. J. R. Taylor, Dr A. Ming</td>
<td>M. W. F. 12, MR12</td>
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<tr>
<td>Numerical Solution of Differential Equations</td>
<td>Prof. A. Iserles</td>
<td>M. W. F. 12, MR13</td>
<td></td>
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<tr>
<td>Planetary System Dynamics</td>
<td>Prof. M. Wyatt</td>
<td>M. W. F. 12, MR14</td>
<td></td>
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<tr>
<td>Commutative Algebra</td>
<td>Dr O. Becker</td>
<td>Tu. Th. S. 9, MR3</td>
<td></td>
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<tr>
<td>Elliptic Curves</td>
<td>Prof. T. Fisher</td>
<td>M. W. F. 11, MR3</td>
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</tr>
<tr>
<td>Elliptic Partial Differential Equations</td>
<td>Prof. N. Wickramasekera, Dr G. Taujanskas</td>
<td>M. W. F. 11, MR4</td>
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<tr>
<td>Quantum Entanglement in Many-body Physics</td>
<td>Prof. F. Verstraete</td>
<td>M. W. 11, MR9</td>
<td></td>
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<tr>
<td>The Life and Death of Galaxies</td>
<td>Prof. V. Belokurov</td>
<td>M. W. F. 11, MR11</td>
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<tr>
<td>Solitons, Instantons and Geometry</td>
<td>Prof. D. M. A. Stuart</td>
<td>M. W. 11, MR12</td>
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<tr>
<td>Large Cardinals</td>
<td>Prof. B. Loewe</td>
<td>M. F. 11, MR13</td>
<td></td>
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<tr>
<td>Advanced Quantum Field Theory</td>
<td>Dr R. A. Reid-Edwards</td>
<td>M. W. F. 12, MR2</td>
<td></td>
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</tbody>
</table>
Topics in Statistical Theory
Prof. R. Samworth
Tu. Th. 9, MR5
Starting 10 Oct. Additional lecture on 13 Oct, 4pm in MR5

Geometric Group Theory
Prof. H. Wilton
M. W. F. 12, MR5

Functional Analysis
Dr A. Zsák
Tu. Th. S. 9, MR13

Statistical Field Theory
Prof. C. E. Thomas
Tu. Th. 10, MR2

Forcing and the Continuum Hypothesis
Dr R. Matthews
M. W. F. 12, MR13

Statistical Learning in Practice
Dr R. Altmeyer
M. W. F. 12, MR9

Causal Inference
Dr Q. Zhao
Tu. Th. 10, MR5

Direct and Inverse Scattering of Waves
Dr O. Rath Spivack
M. W. 12, MR14

Differential Geometry
Dr A. Kovalev
Tu. Th. S. 10, MR9

The Standard Model
Prof. D. Tong
Tu. Th. S. 9, MR3

Cosmology
Prof. B. D. Sherwin
Tu. Th. S. 11, MR2

Introduction to Computational Complexity
Prof. W. T. Gowers
Tu. Th. 9, MR5

Lattice Models
Prof. W. Werner
Tu. Th. 11, MR5

Topics in Convex Optimisation
Prof. H. Fawzi
Tu. Th. 9, MR9

Information Theory
Prof. I. Kontoyiannis
Tu. Th. 11, MR9

Hydrodynamic Stability
Prof. R. R. Kerswell
Tu. Th. 9, MR12
<table>
<thead>
<tr>
<th>Course</th>
<th>Instructor</th>
<th>Days</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of Partial Differential Equations</td>
<td>Dr Z. Wyatt</td>
<td>Tu. Th. S. 11, MR13</td>
<td></td>
<td></td>
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<tr>
<td>Schramm-Loewner Evolutions</td>
<td>Dr Y. Yuan</td>
<td>Tu. Th. 9, MR13</td>
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<tr>
<td>Symmetries, Fields and Particles</td>
<td>Prof. M. Wingate</td>
<td>Tu. Th. S. 12, MR2</td>
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<tr>
<td>Toric Varieties</td>
<td>Dr R. Picciotto</td>
<td>Tu. Th. 9, MR14</td>
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<tr>
<td>Ramsey Theory on Graphs</td>
<td>Dr J. Sahasrabudhe</td>
<td>Tu. Th. 12, MR4</td>
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<tr>
<td>Symplectic Topology</td>
<td>Dr A. Ward</td>
<td>Tu. Th. 10, MR4</td>
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<tr>
<td>Local Fields</td>
<td>Dr R. Zhou</td>
<td>Tu. Th. S. 12, MR5</td>
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<tr>
<td>Robust Statistics</td>
<td>Prof. P-L. Loh</td>
<td>Tu. Th. 10, MR5</td>
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<tr>
<td>Statistics in Medical Practice +</td>
<td>Dr C. Jackson and colleagues</td>
<td>Tu. Th. 12, MR11, twelve lectures</td>
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<td>First lecture on 17 Oct, no lectures on 9 Nov or 28 Nov</td>
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<tr>
<td>Perturbation Methods</td>
<td>Prof. D. Abrahams</td>
<td>Tu. Th. 12, MR12</td>
<td></td>
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<tr>
<td>Extra lecture on Sat 21 October, 12pm, MR12</td>
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<td>No lecture on Th 26 October</td>
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<td>Astrophysical Black Holes</td>
<td>Dr D. Sijacki</td>
<td>Tu. Th. 10, MR12</td>
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<tr>
<td>Theoretical Physics of Soft Condensed Matter</td>
<td>Prof. M. E. Cates</td>
<td>Tu. Th. 10, MR13</td>
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<tr>
<td>Group Cohomology</td>
<td>Dr C. J. B. Brookes</td>
<td>Tu. Th. 11, MR5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Topological Quantum Matter  
Prof. B. Béri  
Tu. Th. 11, MR9

Dynamics of Astrophysical Discs  
Prof. H. Latter  
Tu. Th. 11, MR12

Analysis of Survival Data +  
Dr. P. Treasure  
Tu. Th. 11, MR13

String Theory  
Prof. D. B. Skinner  
Tu. Th. S. 12, MR2

Concentration Inequalities  
Dr. V. Jog  
Tu. Th. 12, MR3

Stochastic Processes in Biology  
Dr. M. Bruna  
Tu. Th. 12, MR12

Laboratory Demonstrations in Fluid Dynamics  
Prof. S. Dalziel  
W. 2-3:30, Fluids Laboratory

+ These two courses constitute the 24-lecture course in Statistics in Medicine. For examination purposes, Statistics in Medicine is considered a Lent term course.

‡ Recordings for this course will only be made available as a reasonable adjustment for students with a recommendation for access to recordings.

§ There will be no recordings available for this course; the lecturer will make alternative accommodations for students with recommendations for reasonable adjustments that include access to recordings.