

## MATHEMATICAL TRIPOS PART III

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

There will be a meeting in *MR2* on Wednesday 3 October 2018 at 9.30 a.m. for all those who intend to offer courses in Part III.

There is a series of meetings for Part III students in *MR2*, Centre for Mathematical Sciences on Wednesdays at 4.15 p.m. 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>.

### MICHAELMAS 2018

**General Relativity**  
PROF. M. J. PERRY  
M. W. F. 9, *MR2*

**Bayesian Modelling and Computation**  
DR S. BACALLADO  
M. W. F. 9, *MR5*

**Lie Algebras and their Representations**  
DR B. ROMANO  
M. W. F. 9, *MR9*

**Galaxy Formation**  
PROF. N. W. EVANS  
W. F. 9, *MR13*

**Slow Viscous Flow**  
PROF. J. R. LISTER  
M. W. F. 9, *MR14*

**Statistical Field Theory**  
PROF. D. TONG  
M. W. F. 10, *MR3* (Sixteen lectures)

**Introduction to Geometric Group Theory**  
DR A. KHUUKHRO  
W. F. 10, *MR13*

**Category Theory**  
PROF. P. T. JOHNSTONE  
M. W. F. 10, *MR9*

### LENT 2019

**The Standard Model**  
DR C. E. THOMAS  
M. W. F. 9, *MR3*

**Modular Representation Theory**  
DR S. MARTIN  
M. W. F. 9, *MR4*

**Stochastic Calculus and Applications**  
DR R. BAUIERSCHMIDT  
M. W. F. 9, *MR5*

**Fluid Dynamics of the Solid Earth**  
DR J. A. NEUFELD, PROF. M. G. WORSTER  
M. W. F. 9, *MR13*

**Advanced Cosmology**  
PROF. A. D. CHALLINOR, DR T. BALDAUF  
M. W. F. 10, *MR4*

**Quantum Information Theory**  
DR N. DATTA  
M. W. F. 10, *MR5*

**Statistical Learning in Practice**  
DR A. J. COCA  
M. W. F. 10, *MR9* (Twelve lectures) and *CATAM Room* (Twelve practicals)

**Iwasawa Algebras**  
DR S. J. WADSLEY  
M. W. F. 10, *MR12*

### EASTER 2019

**Classical and Quantum Solitons**  
PROF. N. S. MANTON  
M. Tu. Th. F. 11, *MR3*

**Planetary System Dynamics**

PROF. M. C. WYATT

M. W. F. 10, *MR11***Advanced Financial Models**

DR M. R. TEHRANCHI

M. W. F. 10, *MR5***Fluid Dynamics of the Environment**

PROF. S. B. DALZIEL

M. W. F. 10, *MR14***Algebraic Topology**

PROF. I. SMITH

M. W. F. 11, *MR5***Advanced Probability**

PROF. J. R. NORRIS, DR W. QIAN

M. W. F. 11, *MR9***Astrophysical Fluid Dynamics**

DR R. RAFIKOV

M. W. F. 11, *MR14***Cosmology**

DR E. PAJER, DR B. D. SHERWIN

M. W. F. 12, *MR2***Analysis of Partial Differential Equations**

DR C. WARNICK

M. W. F. 12, *MR14***Hydrodynamic Stability**

PROF. C. P. CAULFIELD, PROF. R. R. KERSWELL

M. W. F. 12, *MR11***Model Theory**

DR S. BARBINA

W. F. 12, *MR12***Algebraic Number Theory**

PROF. I. GROJNOWSKI

M. W. F. 12, *MR13***Modern Statistical Methods**

DR R. D. SHAH

M. W. F. 12, *MR5***Fluid Dynamics of Climate**

PROF. P. H. HAYNES, DR J. R. TAYLOR

M. W. F. 10, *MR13***3-Manifolds**

DR S. RASMUSSEN

M. W. F. 10, *MR14***String Theory**

DR R. REID-EDWARDS

M. W. F. 11, *MR2***Astrophysical Black Holes**

DR D. SIJACKI

M. W. 11, *MR5***Topics in Set Theory**

PROF. B. LÖWE

M. W. F. 11, *MR13***Topics in Statistical Theory**

PROF. R. NICKL

M. W. 11, *MR14* (First lecture on Friday 18 Jan)**Black Holes**

DR J. E. SANTOS

M. W. F. 12, *MR3***Symplectic Topology**

DR A. KEATING

M. W. F. 12, *MR5***Theoretical Physics of Soft Condensed Matter**

PROF. M. E. CATES

M. W. F. 12, *MR12* (Sixteen lectures)**Astrostatistics**

DR K. MANDEL

M. W. F. 12, *MR13***Introduction to Optimal Transport**

DR M. THORPE

M. W. F. 12, *MR14***Schramm-Loewner Evolutions**

DR J. MILLER

Tu. Th. 9, *MR4*

**Combinatorics**

PROF. I. B. LEADER

Tu. Th. 9, *MR3***Topics in Convex Optimisation**

DR H. FAWZI

Tu. Th. 9, *MR5***Elliptic Curves**

DR T. A. FISHER

Tu. Th. S. 9, *MR9***Symmetries, Fields and Particles**

PROF. N. DOREY

Tu. Th. S. 10, *MR2***Introduction to Discrete Analysis**

PROF. W. T. GOWERS

Tu. Th. 10, *MR5***Algebraic Geometry**

PROF. M. GROSS

Tu. Th. S. 10, *MR9***Distribution Theory and Applications**

DR A. ASHTON

Tu. Th. 10, *MR12***Extrasolar Planets**

DR N. MADHUSUDHAN

Tu. Th. S. 10, *MR13***Algebra**

DR C. J. B. BROOKES

Tu. Th. S. 11, *MR3***Quantum Computation**

PROF. R. JOZSA

Tu. Th. 11, *MR4***Boundary Value Problems for Linear PDEs**

DR K. KALIMERIS

Tu. Th. 11, *MR5***Active Biological Fluids**

PROF. E. LAUGA

Tu. Th. 9, *MR12***Evolution of Galaxies**

DR V. BELOKUROV

Tu. Th. 9, *MR13***Bayesian Inverse Problems**

DR H. KEKKONEN

Tu. Th. 9, *MR14***Dynamics of Astrophysical Discs**

PROF. G. I. OGILVIE

Tu. Th. 10, *MR5***Analysis of Survival Data +**

DR P. TREASURE

Tu. Th. 10, *MR9* (Twelve lectures), starting Tue 29

Jan

**Introduction to Approximate Groups**

DR M. TOINTON

Tu. Th. 10, *MR12***Direct and Inverse Scattering of Waves**

DR O. RATH-SPIVACK

Th. S. 10, *MR13***Elliptic Partial Differential Equations**

DR I. MOYANO

Tu. Th. S. 10, *MR14***Supersymmetry**

DR D. B. SKINNER

Tu. Th. 11, *MR3*, starting Tue 22 Jan**Numerical Solution of Differential Equations**

PROF. A. ISERLES

Tu. Th. S. 11, *MR5***Mixing Times of Markov Chains**

DR J. HERMON

Tu. Th. 11, *MR9*

**Structure and Evolution of Stars**

DR A. N. ZYTKOW

Tu. Th. S. 11, *MR11***Statistics in Medical Practice +**

DR C. JACKSON AND COLLEAGUES

Tu. Th. 11, *MR12* starting Thursday 11 October, no lecture on Thursday 25 October (Twelve lectures)**Topics in Ergodic Theory**

DR P. VARJÚ

Tu. Th. S. 11, *MR13***Quantum Field Theory**

PROF. B. ALLANACH

Tu. Th. S. 12, *MR2***Percolation and Random Walks on Graphs**

DR P. SOUSI

Tu. Th. S. 12, *MR5* (Sixteen lectures)**Differential Geometry**

DR A. G. KOVALEV

Tu. Th. S. 12, *MR9***Optical and Infrared Telescopes and Instruments**

DR I. PARRY

Tu. Th. 12, *MR11***Perturbation Methods**

DR S. J. COWLEY, PROF N. PEAKE

Tu. Th. 12, *MR12***Inverse Problems in Imaging**

DR Y. KOROLEV

Tu. Th. 12, *MR13***Analytic Number Theory**

DR T. BLOOM

Tu. Th. S. 11, *MR12***Binary Stars**

PROF. C. A. TOUT

Tu. Th. 11, *MR13***Advanced Quantum Field Theory**

DR M. B. WINGATE

Tu. Th. S. 12, *MR2*, starting Sat 19 Jan**Complex Manifolds**

DR R. DERVAN

Tu. Th. S. 12, *MR14*

*The following courses are non-examinable*

**Laboratory Demonstrations**

PROF. S. B. DALZIEL, DR J. A. NEUFELD

W. 2-3:30, *Fluids Laboratory*

+ These two courses constitute the 24 lecture course in Statistics in Medicine