

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 7 October 2015 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 Part III and Graduate timetable, which you can import into your own electronic calendar, please see <http://www.timetable.cam.ac.uk>.

MICHAELMAS 2015

Hydrodynamic Stability
PROF. C. P. CAULFIELD
M. W. F. 9, *MR4*

Analysis of Partial Differential Equations
DR D. M. A. STUART
M. W. F. 9, *MR5*

Algebraic Number Theory
DR J. A. THORNE
M. W. F. 9, *MR9*

Astrophysical Fluid Dynamics
PROF. G. I. OGILVIE
M. W. F. 9, *MR11*

Quantum Information Theory
DR W. D. MATTHEWS
M. W. F. 9, *MR12*

Stochastic Networks
PROF. F. P. KELLY
M. W. F. 9, *MR13*

Commutative Algebra
DR C. J. B. BROOKES
M. W. F. 10, *MR2*

Distribution Theory and Applications
DR A. ASHTON
M. W. 10, *MR4*

LENT 2016

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

Stochastic Calculus
DR J. MILLER
M. W. F. 9, *MR5*

Galactic Astronomy and Dynamics
PROF. N. W. EVANS
M. W. F. 9, *MR11*

Topics in Category Theory
DR I. LOPEZ FRANCO
M. W. F. 9, *MR12*

Fluid Dynamics of Climate
PROF. P. F. LINDEN, DR J. R. TAYLOR
M. W. F. 9, *MR13*

Probabilistic Combinatorics and its Applications
PROF. B. BOLLOBÁS
M. W. F. 10, *MR3* (Sixteen lectures)

Spectral Geometry
DR D. BARDEEN
M. W. F. 10, *MR5*

Advanced Cosmology
DR A. D. CHALLINOR, PROF. E. P. S. SHELLARD
M. W. F. 10, *MR13*

EASTER 2016

Classical and Quantum Solitons
PROF. N. S. MANTON
M. Tu. Th. F. 10, *MR4*

Advanced Financial Models

DR M. TEHRANCHI

M. W. F. 10, *MR5***Fluid Dynamics of the Environment**DR S. B. DALZIEL, DR N. M. VRIEND,
PROF. A. W. WOODSM. W. F. 10, *MR12***Planetary System Dynamics**DR M. C. WYATT
M. W. F. 10, *MR13***Quantum Computation**PROF. R. JOZSA
M. W. 10, *MR14***Introduction to Category Theory**PROF. P. T. JOHNSTONE
M. W. F. 11, *MR3***Structure and Evolution of Stars**DR A. N. ŹYTKOW
M. W. F. 11, *MR11***Set-Valued Analysis and Optimisation**DR T. J. M. VALKONEN
M. W. 11, *MR12***Slow Viscous Flow**PROF. J. R. LISTER
M. W. F. 11, *MR13***Mathematics of Operational Research**PROF. R. R. WEBER
M. W. F. 11, *MR14***Cosmology**DR J. R. FERGUSSON
M. W. F. 12, *MR2***Advanced Probability**PROF. J. R. NORRIS, DR G. RAY
M. W. F. 12, *MR3***Active Biological Fluids**

DR E. LAUGA

M. W. F. 10, *MR14***Advanced Quantum Field Theory**DR D. B. SKINNER
M. W. F. 11, *MR2***Representation Theory**DR S. MARTIN
M. W. F. 11, *MR9***Topics in Ergodic Theory**DR P. VARJÚ
M. W. F. 11, *MR11***Morse Theory**DR J. RASMUSSEN
M. W. F. 11, *MR13***Black Holes**PROF. H. S. REALL
M. W. F. 12, *MR3***Elliptic Partial Differential Equations**DR C. BELLETTINI, DR O. CHODOSH
M. W. F. 12, *MR11***Statistics for Stochastic Processes**DR J. SÖHL
W. F. 12, *MR13***Infinite Groups and Decision Problems**DR J. O. BUTTON, DR M. CHIODO
M. W. F. 12, *MR14* (Sixteen lectures)**Techniques in Non-Abelian Additive Combinatorics**PROF. W. T. GOWERS
Tu. Th. 9, *MR4***Complex Manifolds**PROF. M. GROSS
Tu. Th. S. 9, *MR5*

Algebraic Topology

PROF. I. SMITH

M. W. F. 12, *MR9***Probabilistic Number Theory**

DR A. J. HARPER

M. W. F. 12, *MR12***Topics in Set Theory**

DR O. KOLMAN

M. W. F. 12, *MR13***Quantum Field Theory**

PROF. M. J. PERRY

Tu. Th. S. 9, *MR2***Computability and Logic**

DR T. E. FORSTER

Tu. Th. S. 9, *MR4***Time Series §**

DR J.-M. FREYERMUTH

Tu. Th. 9, *MR9* (Twelve lectures)**Inverse Problems**

DR M. BENNING

Tu. Th. 9, *MR14***Symmetries, Fields and Particles**

PROF. N. DOREY

Tu. Th. S. 10, *MR2***Algebraic Geometry**

PROF. C. BIRKAR

Tu. Th. S. 10, *MR4***Extremal Graph Theory**

PROF. A. G. THOMASON

Tu. Th. 10, *MR9***Extrasolar Planets**

DR N. MADHUSUDHAN

Tu. Th. S. 10, *MR12***Supersymmetry and Extra Dimensions**

PROF. F. QUEVEDO

Tu. 9 and W. 10, *MR9***Dynamics of Astrophysical Discs**

DR H. LATTER

Tu. Th. 9, *MR11***Direct and Inverse Scattering of Waves**

DR O. RATH-SPIVACK

Tu. Th. 9, *MR12***Monte Carlo Inference §**

DR K. SADEGHİ

Tu. Th. 9, *MR13* (Twelve lectures)**String Theory**

PROF. P. K. TOWNSEND

Tu. Th. S. 10, *MR2***Percolation and Related Topics**

PROF. G. R. GRIMMETT

Tu. Th. 10, *MR4***Modular Forms**

PROF. A. J. SCHOLL

Tu. S. 10, *MR9* (Lectures start Tu. 19 January,
occasional lectures on Th. to be confirmed by the
lecturer, sixteen lectures in total)**Applied Statistics ++**

DR D. PIGOLI

Tu. 10, *MR13* and *CATAM Room* (Four lectures and
four classes)**Binary Stars**

DR C. A. TOUT

Tu. Th. 10, *MR14***Elliptic Curves**

DR T. A. FISHER

Tu. Th. S. 11, *MR3***Applications of Differential Geometry to Physics**

DR M. DUNAJSKI

Tu. Th. 11, *MR5*

Fluid Dynamics of the Solid Earth

DR J. A. NEUFELD

Tu. Th. 10, *MR13***Applied Statistics ++**

DR D. PIGOLI

Tu. Th. 10, *MR14* and *CATAM Room* (Eight lectures
and eight classes)**Combinatorics**

PROF. I. B. LEADER

Tu. Th. 11, *MR3***Statistical Field Theory**

DR M. B. WINGATE

Tu. Th. 11, *MR5***Differential Geometry**

PROF. P. M. H. WILSON

Tu. Th. S. 11, *MR9***Origin and Evolution of Galaxies**

PROF. M. G. HAEHNELT

Tu. Th. 11, *MR12***General Relativity**

DR U. SPERHAKE

Tu. Th. S. 12, *MR2***Modern Statistical Methods**

DR R. D. SHAH

Tu. Th. 12, *MR4***Functional Analysis**

DR A. ZSÁK

Tu. Th. S. 12, *MR5***Lie Algebras and their Representations**

DR D. I. STEWART

Tu. Th. S. 12, *MR13***Magnetohydrodynamics**

PROF. M. R. E. PROCTOR

Tu. Th. 12, *MR14***Schramm-Loewner Evolutions**

PROF. J. R. NORRIS

Tu. Th. 11, *MR9***Analysis of Survival Data +**

DR P. TREASURE

Tu. Th. 11, *MR12* (Fourteen lectures)**Boundary Value Problems for Linear PDEs**

PROF. T. FOKAS

Tu. Th. 11, *MR13***Topics in Statistical Theory**

DR Q. BERTHET

Tu. Th. 12, *MR4***Perturbation Methods**

DR S. J. COWLEY, DR S. S. PEGLER

Tu. Th. 12, *MR5*

Statistics in Medical Practice +

DR R. TURNER ET AL

Th. 4-6, MR13 (five lectures on 22 Oct., 29 Oct.,
5 Nov., 19 Nov., and 26 Nov.)

The following course is non-examinable

Laboratory Demonstrations in Fluid Dynamics

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

W. 2, *Fluids Laboratory*

+ These two courses constitute the 24 lecture course in Biostatistics

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

§ These two courses constitute the 24 lecture course in Time Series and Monte Carlo Inference