Last update 03 Feb. 15

MATHEMATICAL TRIPOS PART III

All lectures are held at the *Centre for Mathematical Sciences, Clarkson Road* unless otherwise stated.

There will be a meeting in *MR2* on Wednesday 8 October 2014 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.

MICHAELMAS 2014

Category Theory
DR R. B. B. LUCYSHYN-WRIGHT
M. W. F. 9, *MR2*

Advanced Probability
DR A. SOLA
M. W. F. 9, *MR9*

Approximation Theory
DR A. SHADRIN
M. W. F. 9, *MR12*

Cosmology
DR D. D. BAUMANN
M. W. F. 10, *MR3*

Mathematics of Operational Research
DR F. A. FISCHER
M. W. F. 10, *MR4*

Lie Algebras and their Representations
DR D. I. STEWART
M. W. F. 10, *MR9*

Topics in Set Theory
DR O. KOLMAN
M. W. F. 10, *MR12*

Slow Viscous Flow
PROF. J. R. LISTER
M. W. F. 10, *MR13*

LENT 2015

Algebraic Number Theory
DR J. A. THORNE
M. W. F. 9, *MR3*

Black Holes
PROF. H. S. REALL
M. W. F. 9, *MR9*

Elliptic PDEs
DR C. BELLETTINI, DR B. KRUMMEL
M. W. F. 9, *MR11*

Stochastic Calculus and Applications
DR M. TEHRANCHI
M. W. F. 9, *MR12*

Galactic Astronomy and Dynamics
PROF. N.W. EVANS
M. W. F. 9, *MR13*

Advanced Quantum Field Theory
DR D. B. SKINNER
M. W. F. 10, *MR2*

Semigroups of Operators
DR D. J. H. GARLING
M. W. F. 10, *MR9*

Contest Theory
DR M. VOJNOVIC
M. W. 10, *MR11* (Lectures start M. 26 January, additional lectures on F. 6 March, F. 13 March, sixteen lectures in total)

EASTER 2015

Introduction to the Gauge/Gravity Duality
DR J. E. SANTOS
M. Tu. Th. F. 9, *MR4*

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

Analysis of Partial Differential Equations
PROF. C. MOUHOT
M. W. F. 10, *MR14*

Stochastic Networks
PROF. F. P. KELLY
M. W. F. 11, *MR4*

Quantum Information Theory
DR W. D. MATTHEWS
M. W. F. 11, *MR5*

Algebraic Topology
DR J. RASMUSSEN
M. W. F. 11, *MR9*

Fluid Dynamics of the Environment
DR S. B. DALZIEL, DR N. M. VRIEND
M. W. F. 11, *MR11*

Extrasolar Planets – Atmospheres and Interiors
DR N. MADHUSUDHAN
M. W. F. 11, *MR12*

Algebraic Geometry
PROF. P. M. H. WILSON
M. W. F. 12, *MR4*

Advanced Financial Models
DR M. TEHRANCHI
M. W. F. 12, *MR9*

Numerical Solution of Differential Equations
PROF. A. ISERLES
M. W. F. 12, *MR11*

Structure and Evolution of Stars
DR A. N. ŻYTKOW
M. W. F. 12, *MR12*

Computability and Logic
DR T. E. FORSTER
M. W. F. 12, *MR14*

Planetary System Dynamics
DR M. C. WYATT
M. W. F. 10, *MR12*

Topics in Algebraic Geometry
PROF. M. GROSS
M. W. F. 10, *MR13*

Complex and Biological Fluids
DR E. LAUGA
M. W. F. 10, *MR14*

The Standard Model
DR M. B. WINGATE
M. W. F. 11, *MR2*

Representation Theory
DR S. MARTIN
M. W. F. 11, *MR9*

Complex Manifolds
DR J. A. ROSS
M. W. F. 11, *MR12*

Fluid Dynamics of Climate
PROF. P. F. LINDEN, DR J. R. TAYLOR
M. W. F. 11, *MR13*

Time Series and Monte Carlo Inference
DR Y. CHEN, DR S TAVAKOLI
M. W. F. 11, *MR14*

Topics in Ergodic Theory
DR P. VARJÚ
M. W. F. 12, *MR5*

Optimal Investment
PROF. L. C. G. ROGERS
M. W. 12, *MR9*

Introduction to Nonlinear Wave Equations
DR J. W. LUK
M. W. F. 12, *MR11*

Biological Physics
PROF. R. E. GOLDSTEIN, DR U. F. KEYSER
M. W. F. 12, *Small Lecture Theatre, Cavendish Laboratory*

Quantum Field Theory
PROF. M. J. PERRY
Tu. Th. S. 9, *MR2*

Actuarial Statistics
DR S. M. PITTS
Tu. Th. 9, *MR4*

Local Fields
DR T. A. FISHER
Tu. Th. 9, *MR5*

Magnetohydrodynamics
PROF. M. R. E. PROCTOR
Tu. Th. 9, *MR13*

Symmetries, Fields and Particles
PROF. N. S. MANTON
Tu. Th. S. 10, *MR2*

Astrophysical Fluid Dynamics
PROF. G. I. OGILVIE
Tu. Th. S. 10, *MR4*

Techniques in Combinatorics
PROF. W. T. GOWERS
Tu. Th. 10, *MR5*

General Relativity
DR U. SPERHAKE
Tu. Th. S. 11, *MR2*

Commutative Algebra
DR C. J. B. BROOKES
Tu. Th. S. 11, *MR3*

Functional Analysis
DR A. ZSAK
Tu. Th. S. 11, *MR9*

Advanced Cosmology
DR A. D. CHALLINOR, PROF. E. P. S. SHELLARD
M. W. F. 12, *MR13*

Geometric Group Theory
DR H. WILTON
M. W. F. 12, *MR14*

Homotopy Theory
DR O. RANDAL-WILLIAMS
Tu. Th. S. 9, *MR4*

Elementary Methods in Analytic Number Theory
DR A. J. HARPER
Tu. Th. S. 9, *MR5*

String Theory
PROF. P. K. TOWNSEND
Tu. Th. S. 9, *MR9*

Sound Generation and Propagation
DR E. BRAMBLEY
Tu. Th. 9, *MR12*

Applied Statistics ++
DR B. D. M. TOM
Tu. 9, *MR13* and *CATAM Room* (Four lectures and four classes)

Kinetic Theory
DR A. EINAV
Tu. Th. S. 9, *MR14*

Percolation and Related Topics
PROF. G. R. GRIMMETT, DR D. KISS
Tu. Th. 10, *MR4*

Distribution Theory and Applications
DR A. ASHTON
Tu. Th. 10, *MR5*

Homological and Homotopical Algebra
DR J. V. S. HOLSTEIN
Tu. Th. 10, *MR9*

Applied Statistics ++
DR D. PIGOLI, DR S. M. PITTS
Tu. Th. 11, *MR13* and *CATAM room* (Eight lectures and eight classes)

Differential Geometry
DR A. G. KOVALEV
Tu. Th. S. 12, *MR2*

Combinatorics
PROF. A. G. THOMASON
Tu. Th. 12, *MR3*

Modern Statistical Methods
DR R. D. SHAH
Tu. Th. 12, *MR9*

Origin and Evolution of Galaxies
PROF. M. G. HAEHNELT
Tu. Th. 12, *MR11*

Perturbation and Stability Methods
DR S. J. COWLEY, PROF. N. PEAKE
Tu. Th. S. 12, *MR12*

Statistical Field Theory
PROF. R. R. HORGAN
Tu. Th. 12, *MR13*

Statistics in Medical Practice +
DR R. TURNER ET AL
Th. 4-6, *MR13* (Five lectures on 23 Oct., 30 Oct., 6 Nov., 20 Nov., and 27 Nov.)

Dynamics of Astrophysical Discs
DR H. LATTER
Tu. Th. 10, *MR13*

Advanced Quantum Information Theory
DR T. CUBITT
Tu. Th. S. 10, *MR14* (Lectures start Tu. 27 January, sixteen lectures)

Probabilistic Combinatorics
PROF. B. BOLLOBÁS
Tu. Th. 11, *MR3*

Fluid Dynamics of the Solid Earth
DR J. A. NEUFELD, PROF. M. G. WORSTER
Tu. Th. 11, *MR5*

Applications of Differential Geometry to Physics
DR M. DUNAJSKI
Tu. Th. 11, *MR9*

Boundary Value Problems for Evolution and Elliptic PDEs
PROF. A. FOKAS
Tu. Th. 11, *MR12*

Binary Stars
DR C. A. TOUT
Tu. Th. 11, *MR13*

Analysis of Survival Data +
DR P. TREASURE
Tu. Th. 11, *MR14* (Fourteen lectures)

Supersymmetry and Extra Dimensions
PROF. B. ALLANACH, PROF. F. QUEVEDO
Tu. Th. S. 12, *MR4*

Model Theory
PROF. B. LÖWE
Tu. Th. 12, *MR5*

Topics in Statistical Theory
DR R. NICKL
Tu. Th. 12, *MR9*

Direct and Inverse Scattering of Waves
DR O. RATH-SPIVACK
Tu. Th. 12, *MR12*

The following course is non-examinable

Demonstrations in Fluid Dynamics
DR S. B. DALZIEL, DR. J. A. NEUFELD
W. 2, *Fluids Laboratory*

+ These two courses constitute the twenty-four-hour course in Biostatistics
++ These two courses constitute the twenty-four-hour course in Applied Statistics