

FACULTY OF MATHEMATICS

COURSES INTENDED FOR GRADUATES (non-examinable)

MICHAELMAS 2013

Topological Methods in Algebraic Geometry

PROF. B. J. TOTARO

M. W. F. 10, *MR11***Computational Group Theory**

DR R. PARKER

M. W. F. 11, *MR12***Concentration in Discrete Random Processes**

DR L. WARNKE

Tu. Th. 10, *MR11***Computational Methods in Fluid Mechanics**

PROF. E. J. HINCH

Tu. Th. 11, *MR11***The Strong Maximum Principle for Singular Minimum Hypersurfaces and Related Topics**

DR B. KRUMMEL AND DR N. WICKRAMASEKERA

Tu. Th. S. 11, *MR12***Philosophical Aspects of Advanced Quantum Field Theory**

DR N. BOUATTA AND DR N. TEH

Tu. (weeks 2-4), W. (weeks 1, 5-8) 4.30-6, *MR4***Numerical General Relativity**

DR P. FIGUERAS AND DR H. WITEK

F. 11, *MR11***Discrete Complex Analysis and Conformal Invariance**

DR Z. LI

S. 10, *MR11*

LENT 2014

Introduction to Mirror Symmetry

PROF. M. GROSS

M. W. F. 9, *MR14***Algebraic and Arithmetic Geometry**

DR C. BIRKAR

M. W. F. 11, *MR11***Function Spaces**

DR S. DEMOULINI

M. W. F. 11, *MR12***Astronomy of Strong Gravity: Gravitational Wave Generation and Detection**

DR P. CAÑIZARES AND DR J. GAIR

M. W. F. 12, *MR11* (Lectures start on M. 20 January. Twelve lectures)**Irreducible and Holomorphic Symplectic Manifolds**

DR M. SHEN

Tu. Th. 9, *MR12***Spinor Techniques in General Relativity: Part I +**

MISS I. M. M. BORZYM

Tu. Th. 11, *MR11* (Twelve lectures)**Calculus and Algebra**

PROF. I. GROJNOWSKI

Tu. Th. S. 11, *MR14***Contemporary Sampling Techniques and Compressed Sensing**

DR A. C. HANSEN

Tu. Th. 12, *MR14***Foundations of Dynamics and Relativity**

DR D. J. A. SLOAN AND DR J. B. PITTS

Tu. 4.30-6, *MR4*

EASTER 2014

Advanced Topics in Kinetic Theory

DR A. EINAV AND PROF. C. MOUHOT

M. Tu. Th. F. 10, *MR4* (Lectures start on F. 25 April)**Spinor Techniques in General Relativity: Part II +**

DR P. O'DONNELL

M. W. F. 10, *MR11***Homogenization of Partial Differential Equations**

DR H. HUTRIDURGA

M. Tu. Th. F. 9, *MR4***Additive Combinatorics and Equidistribution**

DR P. VARJÚ

M. Tu. Th. F. 11, *MR4*

(Lectures start on M. 28 April)

Consistency of NF

DR T. E. FORSTER

M. W. F. 12, *MR4***Analytic and Birational Geometry**

DR Z. HU

M. Tu. Th. F. 12, *MR5***Calculus of Variations**

DR S. DEMOULINI

M. Tu. Th. F. 12, *MR12***Moduli Spaces of Curves**

DR J. C. OTTEM

M. W. Th. 11, *MR5*

+ The twenty-four-hour course is scheduled over the Lent (twelve hours) and Easter terms (twelve hours).