

# FACULTY OF MATHEMATICS

## COURSES INTENDED FOR GRADUATES (non-examinable)

### MICHAELMAS 2011

#### Quine Systems

DR T. E. FORSTER

M. W. F. 9, *MR11* (Eight lectures, beginning 11 Nov.)

#### Computational Group Theory

DR R. PARKER

M. W. F. 10, *MR11*

#### p-adic Hodge Theory

DR W. KIM

M. W. F. 12, *MR11*

#### Inflation

DR D. D. BAUMANN

M. 2.30-4, W. 4-5.30, F. 2.30-4 *MR9* (Twelve lectures)

#### Computational Methods in Fluid Mechanics

PROF. E. J. HINCH

Tu. Th. 9, *MR5*

#### Techniques in Additive Combinatorics

PROF. W. T. GOWERS

Tu. Th. 12, *MR14*

#### Philosophical Foundations of Quantum Field Theory

DR J. N. BUTTERFIELD AND DR N. BOUATTA

Tu. 4.30-6, *MR4*

#### Philosophy of Classical and Quantum Mechanics

DR J. N. BUTTERFIELD AND DR N. BOUATTA

Th. 4.30-6, *MR4*

### LENT 2012

#### Calculus of Variations

DR S. DEMOULINI

M. W. F. 9, *MR11*

#### Topics in Iwasawa Theory

PROF. J. H. COATES

M. W. F. 11, *MR11*

#### Topics in Number Theory

PROF. A. J. SCHOLL

M. W. F. 1.15-2.15, *MR5*

#### Discrete Quantum Gravity

DR B. A. BAHR

M. W. 2, *MR9*

#### Homological Mirror Symmetry

DR I. SMITH

M. F. 1.30-3, *MR15* (16 lectures, beginning 23 Jan.)

#### Two-dimensional Category Theory

DR I. LOPEZ FRANCO

M. W. F. 3, *MR5*

#### Stable Commutator Length

PROF. D. CALEGARI

Tu. Th. S. 10, *MR14*

#### Decision Methods over Real and Algebraically Closed Fields

DR G. PASSMORE

Tu. Th. 11, *MR11*

#### Class Field Theory

DR T. YOSHIDA

Tu. Th. S. 11, *MR12*

#### Topological Methods in Combinatorics

DR B. BUIKH

Tu. Th. 12, *MR5*

#### Rigid Analytic Geometry and p-adic Modular Forms

DR J. NEWTON

Tu. Th. S. 12, *MR11*

### EASTER 2012

#### Waring's Problem

DR V. R. NEALE

M. W. F. 11, *MR11*

#### Aspects of the Cremona Group

PROF. N. I. SHEPHERD-BARRON

Tu. Th. 12, *MR4*

**Topics in Partial Differential Equations**

DR N. WICKRAMASEKERA

Tu. Th. S. 12, *MR14*

**Philosophical Foundations of Quantum Field Theory**

DR J. N. BUTTERFIELD AND DR N. BOUATTA

Tu. 4.30-6, *MR4*

**Philosophy of Classical and Quantum Mechanics**

DR J. N. BUTTERFIELD AND DR N. BOUATTA

Th. 4.30-6, *MR4*