## Lectures proposed by the Board of the Faculty of Mathematics MATHEMATICAL TRIPOS

Lectures proposed by the Board of the Faculty of Mathematics. Graduates of the University who are not reading for any University Examination may attend without payment any lectures proposed by the Faculty Board of Mathematics.

Part IA students are recommended to attend the induction session which will be held from 9.30 a.m. to 10.45 a.m. on Wednesday 5 October 2011, in the Cockcroft Lecture Theatre.

A meeting will be held for all Part IA students on Friday 11 May 2012 at 2.00 p.m. in Mill Lane Room 3 to discuss examinations and examination techniques.

Note that the non-examinable course on **Topics in the History of Mathematics** will be of interest to all students reading the Mathematical Tripos. Full details are given below.

#### MICHAELMAS 2011

LENT 2012

EASTER 2012

# PART IA

Lectures for Part IA of the Mathematical Tripos will be held in the Cockcroft Lecture Theatre unless otherwise stated.

Numbers and Sets PROF. A. G. THOMASON M. W. F. 10

**Differential Equations** DR N. G. BERLOFF M. W. F. 11

Vectors and Matrices PROF. P. F. LINDEN Tu. Th. S. 10

**Groups** PROF. J. SAXL Tu. Th. S. 11

The following courses are non-examinable

**Introduction to Mechanics** DR S. T. C. SIKLOS Tu. Th. 12, *Arts School, Room C, Bene't Street*  Probability PROF. G. R. GRIMMETT M. W. F. 11

Analysis I PROF. G. P. PATERNAIN Tu. Th. S. 10

Vector Calculus DR J. M. EVANS Tu. Th. S. 11

Dynamics and Relativity PROF. D. TONG Tu. 12, W. F. 10 **Optimisation\*** DR F. A. FISCHER M. W. F. 9, *Mill Lane Room 3* (Twelve lectures)

Variational Principles\* PROF. N. PEAKE M. W. F. 10, *Mill Lane Room 3* (Twelve lectures)

Metric and Topological Spaces\* PROF. P. M. H. WILSON M. W. F. 11, *Mill Lane Room 3* (Twelve lectures)

**Computational Projects\*** DR S. J. COWLEY Tu. Th. 10 (Eight lectures)

The following course is non-examinable

**Topics in the History of Mathematics: Renaissance to Enlightenment** DR P. BURSILL-HALL W. F. 4, *Centre for Mathematical Sciences, MR3*  The following courses are non-examinable

**Concepts in Theoretical Physics** DR D. D. BAUMANN Tu. Th. 11 (Eight lectures) **Topics in the History of Mathematics: Ancients to the Middle Ages** DR P. BURSILL-HALL W. F. 4, *Centre for Mathematical Sciences, MR3* 

\* Examined in Part IB of the Tripos

## Mathematics with Physics Option:

Students taking this third option should attend Vectors and Matrices, Groups, Differential Equations, Analysis I, Vector Calculus and Probability from Part IA of the Mathematical Tripos, together with the lectures listed at *http://timetables.caret.cam.ac.uk/live/web/view.html#course=T0024001692011006* in Part IA Physics of the Natural Sciences Tripos. They will be required to do Physics practical work, and should attend at least the first lecture of Course B of the Computing Course for Physical Scientists.

### **Topics in the History of 19th Century Mathematics** DR P. BURSILL-HALL ET AL W. F. 4, *Centre for Mathematical Sciences, MR3*