MICHAELMAS 2009

LENT 2010

EASTER 2010

CHEMISTRY

Advanced courses (mainly for Research Students and others interested)

STAFF OF THE CHEMCIAL LABORATORY Research Techniques in Organic Chemistry. W. 9 STAFF OF IRC IN SUPERCONDUCTIVITY Classical and High Temperature Superconductivity. Th. 11 (Eight lectures) *IRC Seminar Room* A short course on workshop practice is also offered to new Physical Chemistry graduate students early in the Michaelmas Term.

QUANTITATIVE MODELLING

Industrial Processes in the Natural Resource Sector to be held at the B.P. Institute

PROF. A. WOODS Modelling Industrial and Environmental Flows. Th. 11.30 *Seminar Room*

The same continued.

EARTH SCIENCES

Regular Seminars

PROF. J. A. JACKSON AND OTHERS Topics in Geological Sciences. Tu. 5 *Harker Room* PROF. D. MCKENZIE AND OTHERS

Colloquium in Geophysics. W. 4.30 Bullard Laboratories

PROF. H. E. HUPPERT AND OTHERS Seminars in Theoretical Geophysics. Th. 2 DAMTP Room A

PROF. H. ELDERFIELD, DR L. SKINNER AND OTHERS Quaternary Discussion Group. alternate F. 8.30 p.m. *Christ's College*

OTHER COURSES

The same continued.

The same continued.

The same continued.

PROF. D. MCKENZIE, PROF. K. PRIESTLEY AND DR A. DEUSS Physics of the Earth as a Planet. M. W. F. 10 *Cavendish Laboratory*

MICHAELMAS 2009

LENT 2010

EASTER 2010

HISTORY AND PHILOSOPHY OF SCIENCE

Seminars and Reading Groups for Research Students in History and Philosophy of Science

Dr Lewens and Prof. Jardine will meet all new graduate students at 2pm on Wednesday 7 October in Seminar Room 2 to discuss the course and arrange supervision.

Unless otherwise stated, all meetings will be held in the *History and Philosophy of Science Seminar Rooms, Free School Lane.*

Seminar Programmes can be obtained at the start of each term from the Departmental Office or from the website www.hps.cam.ac.uk/seminars

Research Methods and Resources Seminar Th 4 (weeks 1 and 2). For all Part III, M.Phil and PhD students. History and Philosophy of Science Seminar. Th. 4.30 (weeks 3-8) M.Phil/Part III Seminar in History, Philosophy and Sociology of Science, Technology and Medicine. W. 3 Psy Studies. W. 5 (fortnightly) History of Medicine Seminar. Tu. 5 Cabinet of Natural History. M. 1 Philosophy Workshop. W. 1 (fortnightly) HPS History Workshop. W. 1 (fortnightly) Kant Reading Group. Tu. 1 History and Theory Reading Group. F. 2.30 (fortnightly) Metaphysics of Science Reading Group. M. 1 Twentieth Century Think Tank. Tu. 1 (fortnightly) Latin Therapy Group. F. 4 Science and Literature Reading Group. M. 7.30 (fortnightly) [Darwin College] Medieval Philosophy Reading Group. W. 1 (CRASSH, 17 Mill Lane) Philosophy of Physics Seminar. M. 4.30 (Meeting Room 14, Centre for Mathematical Sciences)

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MICHAELMAS 2009

LENT 2010

EASTER 2010

M.PHIL. IN MICRO- AND NANOTECHNOLOGY ENTERPRISE

Course Director: Dr R. Vasant Kumar (email: rvk10@cam.ac.uk) Course Website: www.msm.cam.ac.uk/nanoenterprise

Lectures will be delivered in the Department of Materials Science and Metallurgy, *Department of Engineering, *†Department of Chemistry and §Nanoscience Centre.*

- DR J. LOUDON, DR R. A. OLIVER AND MS M. VICKERS NE.01 Characterisation Techniques (Sixteen lectures) DR A. A. SESHIA
- *NE.02 MEMS Design (Sixteen lectures) DR A. FLEWITT
- *NE.03 Materials and Processes for MEMS (sixteen lectures)
- DR A. AZIZ AND DR S. WIMBUSH
- NE.04 Nanofabrication Techniques (Sixteen lectures) PROF. J. L. DRISCOLL, PROF. A. L. GREER AND PROF. A. H. WINDLE
- NE.05 Nanomaterials (Sixteen lectures)
- [†]DR J. NITSCHKE AND DR W. T. S. HUCK

NE.06 Nanochemistry (Sixteen lectures)

- DR C. FORD
- NE.07 Physics at the Nanometre-scale (Sixteen lectures)

- DR P. D. BARKER NE.08 Bionanotechnology (Sixteen lectures)
- PROF. A. L. GREER AND PROF. B. A. GLOWACKI NE.09 Glasses and nanomaterials (Sixteen

 - lectures)
- DR R. V. KUMAR AND DR C. SCHWANDT NE.10 Nanotelectrochemistry (Sixteen lectures)

Additional lecture courses

VARIOUS LECTURERS Science Communication in Business, Media and Research (Twenty-four lectures) VARIOUS LECTURERS MoTI Management of Technology and Innovation (Forty-eight lectures) to be arranged by the Judge Institute of Management PROF M WELLANDS Societal and Ethical Dimensions of Nano and Biotechnology (six lectures)

MATERIALS SCIENCE AND METALLURGY

Courses for Graduates

Course Organiser: Dr R. E. M. Ward (email: remw2@cam.ac.uk)

Lectures will be given in the Department of Materials Science and Metallurgy, unless otherwise stated.

A detailed timetable is available in the Department. Further information on the Research School is at http://www.msm.cam.ac.uk/Department/Internal/graduate/index.html

STAFF OF THE DEPARTMENT

- Techniques of Materials Research. M. Tu. W. Th. F. (Twenty lectures)
- DR R. A. OLIVER AND DR J. LOUDON
- Characterisation Techniques (Sixteen lectures)
- DR J. S. BARNARD
- Scanning Electron Microscopy. (Eight lectures)
- DR R. E. CAMERON AND MISS M. E. VICKERS
- X-Ray and Neutron Diffraction Methods. (Six lectures)
- PROF. C. J. HUMPHREYS Advanced Transmission Electron Microscopy. (Seven lectures)
- DR J. S. BARNARD
- Microanalysis. (Eight lectures) DR S. M. BEST
- Introduction to Biomaterials. (Four lectures)
- DR R. V. KUMAR AND DR C. SCHWANDT
- Materials Chemistry. (Six lectures)
- DR W. O. SAXTON
- Image Processing in Materials Science.(Four lectures)
- DR S. C. WIMBUSH AND DR A. AZIZ
- Microfabrication. (Six lectures)

[Special No. 1

M.PHILS. (one-year courses), DIPLOMAS AND SPECIAL COURSES

MICHAELMAS 2009

LENT 2010

EASTER 2010

ASTRONOMY AND ASTROPHYSICS DEPARTMENT OF PHYSICS

Lectures take place in the *Ryle Seminar Room, Rutherford Building, Cavendish Laboratory.*

Regular Seminars

Principal Seminars Cavendish Physical Society. W. 4.15 (Four seminars, 14, 28 Oct., 11, 25 Nov.)	The same continued. (Four seminars, 20 Jan., 3, 17 Feb., 3 Mar.)	The same continued. (Two seminars, 28 Apr., 12 May)
Research Group Seminars		
PROF. G. G. LONZARICH AND OTHERS		
Quantum Matter. W. 11.15	The same continued.	The same continued.
DR P. ALEXANDER AND OTHERS		
Astrophysics. Tu. 4.30	The same continued.	The same continued.
PROF. M. A. PARKER AND OTHERS		
High Energy Physics. Tu. 3	The same continued.	The same continued.
PROF. D. A. RITCHIE AND OTHERS	771	771 · · · 1
Semiconductor Physics. M. 2.15	The same continued.	The same continued.
DR W. G. PROUD AND OTHERS	The same continued.	The same continued.
PCS (Materials). Th. 4.30	The same continued.	The same continued.
PROF. A. M. DONALD AND OTHERS Biological and Soft Systems. F. 2.15	The same continued.	The same continued.
PROF. R. H. FRIEND AND OTHERS	The same continued.	The same continued.
Optoelectronics. Tu. 2.15	The same continued.	The same continued.
PROF. M. C. PAYNE AND OTHERS	The same continued.	The same continued.
Theory of Condensed Matter. Th. 2.15	The same continued.	The same continued.
PROF. H. SIRRINGHAUS AND OTHERS		
Microelectronics, F. 11	The same continued.	The same continued.
PROF. R. T. PHILLIPS AND OTHERS		
Atomic, Mesoscopic and Optical Physics. M. 3.30	The same continued.	The same continued.

Courses recommended for Research Students in Solid State Physics

Lectures are given in the *TCM Seminar Room*, *Mott Building* or *the Mott Seminar Room* (*M*), *Mott Building*, unless otherwise stated.

The same continued.

Solid State Physics. M. W. F. 9 (*M*) PROF. V. HEINE Electronics Structure and Bonding Across the Periodic Table. (Eight lectures) Tu. Th. 10 (*TCM*) PROF. D. E. KHMELNITSKII AND OTHERS Statistical Physics. (Twelve lectures) M. W. 10 (*TCM*) DR N. DRUMMOND Electronic Structure of Solids. (Eight lectures) Tu. Th. 10 (*TCM*) PROF. D. E. KHMELNITSKII Fairy Tales. (Six lectures) F. 10 (*TCM*)

STAFF OF THE MOTT BUILDING

DR J. KEELING AND OTHERS Light-Matter Interaction and Quantum Optics. (Twelve lectures) Tu. Th. 10 (TCM) DR S. AHNERT AND OTHERS Complex Networks. (Six lectures) M. W. 10 (TCM)DR G. MOELLER Topologically Protected Quantum Computation with Anyons. (Five lectures) M. W. 10 (TCM) PROF. D. E. KHMELNITSKII AND OTHERS Research in TCM. Tu. Th. 10 (TCM) DR M. RUTTER Introduction into Computation. (Six lectures) M. W. 10 (TCM) PROF. D. E. KHMELNITSKII Fairy Tales. (Six lectures) F. 10 (TCM)

Courses recommended for Research Students in Astrophysics

Lectures take place in the Sackler Lecture Theatre, Institute of Astronomy, and in the Ryle Seminar Room, Rutherford Building, Cavendish Laboratory.

CAVENDISH ASTROPHYSICS GROUP AND THE INSTITUTE OF ASTRONOMY

DR D. F. BUSCHER, PROF. P. C. HEWETT AND OTHERS See http://www.mrao.cam.ac.uk/lectures.html for a detailed timetable.

The same continued.

The same continued.

MICHAELMAS 2009

LENT 2010

EASTER 2010

Courses recommended for Research Students in High Energy Physics

DR C. G. LESTER AND OTHERS Selected Topics in Elementary Particle Physics. Tu. 2 Rutherford Seminar Room

The same continued.

Courses recommended for Research Students in Biological and Soft Systems Physics

DR J. GUCK AND PROF. A. MARTINEZ-ARIAS The physics of living matter Tu. 2 ITC Meeting Řoom

Courses organised by the Centre for Scientific Computing Lectures take place in the Microclectronics Research Centre Seminar Room (MRC).

DR N. NIKIFORAKIS

- Numerical solution of Partial Differential Equations. (Part 1) M. W. F. 2-4 (beginning 19 Oct.) DR N NIKIFORAKIS
- Numerical solution of Partial Differential Equations. (Part 2) M. W. F. 2-4 (beginning 26 Oct.) DR D. E. A. VAN ODYCK
- Solution of Linear Systems, Initial Value and Boundary Value Problems. Tu. Th. 2 (beginning 20 Oct.)
- DR K. R. BATES Mesh Generation and Mesh Adaptation for Partial Differential Equations. Tu. Th. 3 (beginning 20 Oct.)