Project Presentation

Each student will be required to give a short project talk - **(Each talk should be 10 mins duration leaving 5 mins for questions)**

11th December 2013

Chairman: Prof Erling Riis, JA 5.04

Student	Project	Degree	Year	Time	Supervisors
Ben Docherty	Resonant Electron Beam-light Interactions	MPhys Physics	5	1:00 – 1:15pm	Brian McNeil, Gordon Robb
Dominic Hunter	Bose Einstein Condensate (BEC) Simulations	MPhys Physics	5	1:15 – 1:30pm	Gordon Robb, Aidan Arnold
Richard Peddie	Fluctuations and Noise in Cold Atoms	MPhys Physics	5	1:30 – 1:45pm	Francesco Papoff, Gordon Robb
Mark Boules	Interaction of Spatial Optical Solitons	MPhys Physics	5	1:45 – 2:00pm	Gian-Luca Oppo, Willie Firth
Calum Williams	Simulations of Spin-Polarized Vertical-Cavity Surface-Emitting Lasers	MPhys Physics	5	2:00 – 2:15pm	Gian-Luca Oppo, (Thorsten Ackemann)
Constantinos Papadopoulos	Neurophotonic Devices for Interfacing with Neural Circuits in the Brain	MPhys Physics	5	2:30 – 2:45pm	Keith Mathieson, Niall McAlinden
Lisa Blair	Quantum Cascade Laser Sensing of Gaseous Isotopes	MPhys Physics	5	2:45 – 3:00pm	Nigel Langford, Geoff Duxbury
Calum Macrae	Coherent Population Trapping in Atomic Vapours	MPhys Physics	5	3:00 – 3:15pm	Erling Riis, (Paul Griffin)
Martin Grant	Self-organized Patterns in Rb Vapour	MPhys Physics	5	3:15 – 3:30pm	(Thorsten Ackemann), Aidan Arnold
Mark Logan	Polarization and Feedback Dynamics of VCSELs	MPhys Physics	5	3:30 – 3:45pm	(Thorsten Ackemann), Erling Riis
Hannah Currie	Radiation Reaction	MPhys Physics	5	4:00 – 4:15pm	Dino Jaroszynski, Adam Noble
Adam Mackie	Laser Wakefield Acceleration and Betatron Gamma Ray Radiation	MPhys Physics	5	4:15 – 4:30pm	Dino Jaroszynski, Ranaul Islam
Maria Weikum	Phase-contrast X-ray imaging using an X-ray source based on a laser-plasma accelerator	MPhys Physics	5	4:30 – 4:45pm	Dino Jaroszynski, Silvia Cipiccia
Thomas Duffy	Sweep Frequency Microwave Pulse Compression using a Helically Corrugated Waveguide	MPhys Physics	5	4:45 – 5:00pm	Kevin Ronald, Wenlong He

11th December 2013

Chairman: Prof Kevin O'Donnell, JA 8.24

Student	Project	Degree	Year	Time	Supervisors
Christopher McLaughlin	Quantitative Hyperspectral Beam Attenuation Meter	MPhys Physics	5	11:00 – 11:15am	David McKee, Alex Cunningham
Callum Shanks	Spectral Deconvolution of Inherent Optical Properties in Marine Water Columns	MPhys Physics	5	11:15 – 11:30am	David McKee, Alex Cunningham
Kyle Bryson	Stimulated Raman spectroscopy (SRS) of Organic liquids	MPhys Physics	5	12:30 – 12:45pm	Tom Han, David McKee
Christopher Bryce	Characterisation of Bulk and Thin film Semiconductor Layers for Solar Cells	MPhys Physics	5	2:00 – 2:15pm	Rob Martin, Michael Yakushev
Kelly Thomson	Molecular Mechanisms of Biological Adaptation to Extreme Ionic Environments	MPhys Physics	5	2.15 – 2.30pm	Maxim Fedorov, Neil Hunt, David Palmer
Audrey Gillies	A Physical Investigation of Protein-drug Binding	MPhys Physics	5	2:30 – 2:45pm	Neil Hunt, Paul Hoskisson
Oliver Hay	Uncovering the Early Stages of Protein Folding	MPhys Physics	5	2:45 – 3:00pm	Neil Hunt, Maxim Fedorov
Damien McLaughlin	Intrinsic Fluorophores in Sensing Applications	MPhys Physics	5	3:15 – 3:30pm	Olaf Rolinski, Yu Chen
Holly Little	Fabricating Amyloid Functional Materials for Artificial Photosynthesis	MPhys Physics	5	3:30 – 3:45pm	Olaf Rolinski, Yu Chen
Alastair Davy	Modifying Melanin's Structure	MPhys Physics	5	3.45 – 4:00pm	David Birch, Jens Sutter