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)**

2nd December 2015

Chair: Prof Kevin O'Donnell, JA 5.06

Student	Project	Time	Supervisors	Independent Marker
Matteo Demelas	Single-shot, 3D reconstruction of the spatial profile of a laser beam	1:00 – 1:15pm	Paul Griffin	Nigel Langford
Mark Carmichael	Photonic materials and devices for Visible Light Communication (VLC)	1:15 – 1:30pm	Benoit Guilhabert	Nicolas Laurand
Gwen Morris	Neurophotonic systems for interfacing with the retina	1:30 – 1:45pm	Keith Mathieson	Niall McAlinden
Gregor McDowall	Receiving Information from Smart Illumination	1:45 – 2:00pm	Johannes Herrnsdorf	Michael Strain
Gemma King	Medical Radio-isotope Production using a Laser-Plasma Wakefield Accelerator	2:15 – 2:30pm	Mark Wiggins	Bernhard Hidding
Alan Brown	Modelling laser-driven plasma expansion and ion acceleration dynamics	2:30 – 2:45pm	Paul McKenna, Ross Gray	Brian McNeil
Jonathan Jarrett	Design study on plasma optics	2:45 – 3:00pm	Paul McKenna, Ross Gray	Brian McNeil
Adam Ross	Laser Wakefield Acceleration and Betatron Gamma Ray Radiation	3:00 – 3:15pm	Ranaul Islam	Zheng-Ming Sheng
Craig Murdoch	Compact X-ray sources from nonlinear Thomson scattering based upon all-optical schemes	3:15 – 3:30pm	Zheng-Ming Sheng, Feiyu Li	Brian McNeil
Nick Bruce	Doping profile measurements in silicon p-n junctions via capacitance-voltage measurements	3:45 – 4:00pm	Carol Trager-Cowan, Paul Edwards	Andrew Daley
Ross Johnston	Statistical analysis of defect distributions in semiconductor thin films	4:00 – 4:15pm	Carol Trager-Cowan, Rob Martin	Paul Edwards
Anthony Howley	Effect of Varying Structure on Efficiency of InGaN LEDs	4:15 – 4:30pm	Rob Martin, Jochen Bruckbauer	Kevin O'Donnell
Elaine Adair	A Physical Investigation of Protein-drug Binding	4:30 – 4:45pm	Neil Hunt	Maxim Fedorov
Andrew Farrell	Uncovering the early stages of protein folding	4:45 – 5:00pm	Neil Hunt	Maxim Fedorov
Callum Runciman	Noble Metal Quantum Dots	5:00 – 5:15pm	Yu Chen	David Birch

3rd December 2015

Chairman: Prof Gian-Luca Oppo, JA 5.05

Student	Project	Time	Supervisors	Independent Markers
Benjamin Ross	Quantifying quantum steering via semidefinite programming	1:00 – 1:15pm	Marco Piani	Daniel Oi
Leon Chan	Ghost imaging and the Klyshko approach	1:15 – 1:30pm	John Jeffers	Marco Piani
Steven Russell	Distinguishability of quantum states	1:30 – 1:45pm	Marco Piani	John Jeffers
Karen Wallace	Dynamics of impurity atom coupled to a quantum gas	1:45 – 2:00pm	Andrew Daley, Suzanne McEndoo	John Jeffers
Steven Lennox	BEC simulations	2:00 – 2:15pm	Gordon Robb	Aidan Arnold
Philip Doyle	Interaction of Spatial Optical Solitons	2:30 – 2:45pm	Gian-Luca Oppo	Thorsten Ackemann
Craig Gordon	Dynamics of Coupled Laser Systems	2:45 – 3:00pm	Gian-Luca Oppo	Gordon Robb
Mathias Weisen	Self-structuring and Optomechanics of Cold Atoms	3:00 – 3:15pm	Gian-Luca Oppo	Gordon Robb
Samuel Anderson	Spiral Bandwidth Control in Optical Parametric Oscillators	3:15 – 3:30pm	Alison Yao	Francesco Papoff
James Denholm	Computational Modelling of Gaussian Beam Propagation in a Non Resonant Optical Cavity	3:30 – 3:45pm	Nigel Langford	Alison Yao
Matthew Brown	Computational modelling of X-ray Free electron Lasers	4:00 – 4:15pm	Brian McNeil	Kevin Ronald
Martyn Hunter	Resonant Electron Beam-light Interactions	4:15 – 4:30pm	Brian McNeil	Gordon Robb
Scott Thomas	Computational modelling of X-ray Free electron Lasers	4:30 – 4:45pm	Brian McNeil	Kevin Ronald
Stacey Mitchell	Laser Selective Excitation Studies of Nd3+ doped mixed garnets	4:45 – 5:00pm	Tom Han	Ben Hourahine
David Newton	Spectrocopic Studies of Rare-earth ions doped in LiNbO3	5:00 – 5:15pm	Tom Han	Ben Hourahine