

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)

10th December 2014

Chair: Prof. Kevin O'Donnell, JA 8.13

Student	Project	Degree	Year	Time	Supervisors
Ivan Morgan	Eu-doped GaN	MPhys Physics	5	11:00 – 11:15am	Kevin O'Donnell, Rob Martin
Catherine Brasser	Electroluminescence spectroscopy and electrical characterisation of light-emitting diodes	MPhys Physics	5	11:15 – 11:30am	Rob Martin, Paul Edwards
Rachel Elvin	Effects of electron irradiation on photoluminescence spectra of thin film Cu(InGa)Se ₂	MPhys Physics	5	11:30 – 11:45am	Rob Martin, Michael Yakushev

Chair: Prof. Kevin O'Donnell, JA 5.06

Student	Project	Degree	Year	Time	Supervisors
Hazel Stewart	Nanoparticle Metrology	MPhys Physics	5	1:00 – 1:15pm	David Birch, Jens Sutter
Junaid Ahmad	Spectroscopic Studies of Pheomelanin: Spectra, Kinetics, Modulators	MPhys Physics	5	1:15 – 1:30pm	Jens Sutter, David Birch
Chloe Chung	Optical Properties of Nanoparticles	MPhys Physics	5	1:30 – 1:45pm	Yu Chen, Olaf Rolinski
Neil Stevenson	Optical Second Harmonic Generation in Urea	MPhys Physics	5	1:45 – 2:00pm	Tom Han, Nigel Langford
Robert Harris	Optical forces on nanoparticles	MPhys Physics	5	2:15 – 2:30pm	Ben Hourahine, Francesco Papoff, Gordon Robb
Craig Colquhoun	Highly efficient frequency up-conversion in Rb vapour	MPhys Physics	5	2:30 – 2:45pm	Aidan Arnold, Erling Riis
Charelle Dunbar-Dawe	Holographic Atom Traps	MPhys Physics	5	2:45 – 3:00pm	Stefan Kuhr, Elmar Haller
Johnathan Conway	Cold atom-light interactions	MPhys Physics	5	3:00 – 3:15pm	Gordon Robb,
Kristofer Gray	BEC-light interactions	MPhys Physics	5	3:15 – 3:30pm	Gordon Robb, Gian-Luca Oppo
Liviu Chirondoian	Exotic quantum operations with light	MPhys Physics	5	3:30 – 3:45pm	John Jeffers, Daniel Oi

10th December 2014

Chairman: Prof. Adrian Cross, JA 5.04

Student	Project	Degree	Year	Time	Supervisors
Timothy Heelis	Simulation of electromagnetic waves in magnetized plasmas	MPhys Physics	5	1:00 – 1:15pm	Bengt Eliasson, Kevin Ronald, David Speirs
Gavriil Chatzitheodoridis	MonteCarlo Simulation and cooling performance of the MICE Step V laboratory experiment	MPhys Physics	5	1:15 – 1:30pm	David Speirs, Kevin Ronald
Sean Davies	The theory of X-ray Free electron Lasers	MPhys Physics	5	1:30 – 1:45pm	Brian McNeil, Gordon Robb
James Simpson	The scientific applications of X-ray Free Electron Lasers	MPhys Physics	5	1:45 – 2:00pm	Brian McNeil, Gordon Robb
Lewis Reid	Capillary Discharge Waveguides for Laser-Plasma Interactions	MPhys Physics	5	2:00 – 2:15pm	Dino Jaroszynski, Mark Wiggins
Gregor Donaldson	Radiotherapy using Beams from Laser-plasma Accelerators	MPhys Physics	5	2:30 – 2:45pm	Dino Jaroszynski, Silvia Cipiccia
Matthew Lebessis	Radiotherapy using Beams from Laser-plasma Accelerators	MPhys Physics	5	2:45 – 3:00pm	Dino Jaroszynski, Silvia Cipiccia
Alexander Macdonald	Laser-Wakefield Plasma Accelerated electron optimization for Very High Energy Electron (VHEE) cancer treatment	MPhys Physics	5	3:00 – 3:15pm	Dino Jaroszynski, Silvia Cipiccia
Alexander Macleod	Radiation Reaction	MPhys Physics	5	3:15 – 3:30pm	Dino Jaroszynski, Adam Noble
Kelsey Provan	Radiation Reaction	MPhys Physics	5	3:30 – 3:45pm	Dino Jaroszynski, Adam Noble
Stephen Howorth	The Physics of DNA	MPhys Physics	5	3:45 – 4:00pm	Neil Hunt, Glenn Burley