

Project Viva Draft Timetable 2013

Monday 29th April 2013 - Chairman: Prof Erling Riis, JA 8.07

Student	Project	Degree	Year	Time	Supervisors
Steven Crossan	Modelling the Scattering of Light in the Sea	MSci Physics	5	9:00 – 9:45am	David McKee, Alex Cunningham
Robbie Wilson	Capillary Discharge Waveguides for Laser-Plasma Interactions	MSci Physics	5	9:45 – 10:30am	Dino Jaroszynski, Mark Wiggins
Hersimerjit Padda	Radiotherapy using Beams from Laser-plasma Accelerators	MSci Photonics	5	10:30 – 11:15am	Dino Jaroszynski, Silvia Cippicia
	BREAK				
Stefan Celosia	BEC Simulations	MSci Physics	5	11:30 – 12:15pm	Gordon Robb, Aidan Arnold
Gavin Cheung	Quantum Optical Computational Toolbox	MSci Physics	5	12:15 – 1:00pm	John Jeffers, Gian-Luca Oppo
	LUNCH				
Penny Mitchell	Biodegradable Choline-based Surfactants for Improving Stability of Carbon Nanoparticle Dispersions in Water	MSci Physics	5	2:00 – 2:45pm	Maxim Fedorov, David Birch
Gordon Hithell	The Physics of DNA	MSci Applied Physics	5	2:45 – 3:30pm	Neil Hunt, Katrin Adamczyk, Glenn Burley
	BREAK				
Ben Russell	Energy Transfer as a Nanoscale ruler	MSci Physics	5	3:45 – 4:30pm	Yu Chen, Olaf Rolinski
Zetao Xu	Optical Properties of Nanoparticles	MSci Physics	5	4:30 – 5:15pm	Yu Chen, Olaf Rolinski

Monday 29th April 2013 - Chairman: Prof Kevin O'Donnell, JA 8.24

Lorraine Newell	Nanoscale Characterisation of Nitride Semiconductors using Electron Channelling Contrast Imaging	BSc Hons Physics	4	9:00 – 9:45am	Carol Trager-Cowan, Paul Edwards
Taylor Stubbs	Nanoscale Characterisation of Nitride Semiconductors using Electron Channelling Contrast Imaging	BSc Hons Physics	4	9:45 – 10:30am	Carol Trager-Cowan, Paul Edwards
Mark Gallagher	Inter and Intra-band Spectroscopy of GaN Quantum Dots	MPhys Physics	4	10:30 – 11:15am	Kevin O'Donnell, Rob Martin
	BREAK				
Christopher Bryce	Characterisation of Bulk and Thin film Semiconductor Layers for Solar Cells	MPhys Physics	4	11:30 – 12:15pm	Rob Martin, Michael Yakushev
Muhammad Zaid	Solar Oven	BSc Hons Physics	4	12:15 – 1:00pm	Stirling Howieson, Kevin O'Donnell
	LUNCH				
Victoria Phillips	Photo-thermal Measurements of Optical Absorption	BSc Hons Mathematics and Physics	4	2:00 – 2:45pm	Tom Han, Nick Lockerbie
Ruth Prophet	Testing for gravitational coupling to Entropy	BSc Hons Physics	4	2:45 – 3:30pm	Nick Lockerbie, Tom Han
	BREAK				
Amy Black	A Physical Investigation of Protein-drug Binding	BSc Hons Physics	4	3:45 – 4:30pm	Neil Hunt, Paul Hoskisson
Audrey Gillies	A Physical Investigation of Protein-drug Binding	BSc Hons Physics	4	4:30 – 5:15pm	Neil Hunt, Paul Hoskisson

Tuesday 30th April 2013 - Chairman: Prof Erling Riis, JA 8.07

Student	Project	Degree	Year	Time	Supervisors
Martin McGregor	Modelling the Interaction of Electron Beams with Semiconductor Devices	MSci Physics	5	9:00 – 9:45am	Rob Martin, Paul Edwards
Calum Macrae	Coherent Population Trapping in Atomic Vapours	MPhys Physics	4	9:45 – 10:30am	Erling Riis, Paul Griffin
James McGilligan	Bose-Einstein Condensate Experiments	MPhys Physics	4	10:30 – 11:15am	Aidan Arnold, Erling Riis
	BREAK				
Martin Grant	Self-organized Patterns in Rb Vapour	MPhys Physics	4	11:30 – 12:15pm	Thorsten Ackemann, Aidan Arnold
Mark Logan	Polarization and Feedback Dynamics of VCSELs	MPhys Physics	4	12:15 – 1:00pm	Thorsten Ackemann, Erling Riis
	LUNCH				
Constantinos Papadopoulos	Simulations of Coupled Laser Networks	BSc Hons Physics	4	2:00 – 2:45pm	Gian-Luca Oppo, Thorsten Ackemann
Calum Williams	Simulations of Spin-Polarized Vertical-Cavity Surface-Emitting Lasers	MPhys Physics	4	2:45 – 3:30pm	Gian-Luca Oppo, Thorsten Ackemann
	BREAK				
Ben Docherty	Resonant Electron Beam-light Interactions	MPhys Physics	4	3:45 – 4:30pm	Brian McNeil, Gordon Robb
Luke Nuttall	Modelling 4th Generation Light Sources	BSc Hons Mathematics and Physics	4	4:30 – 5:15pm	Brian McNeil, Gordon Robb

Tuesday 30th April 2013 - Chairman: Prof Kevin O'Donnell, JA 8.24

Kyle Bryson	Renormalization of Alloys	BSc Hons Physics	4	9:00 – 9:45am	Ben Hourahine, Gian-Luca Oppo
Nicola Connelly	Modifying Melanin's Structure	BSc Hons Physics	4	9:45 – 10:30am	David Birch, Jens Sutter
Alastair Davy	Modifying Melanin's Structure	MPhys Physics	4	10:30 – 11:15am	David Birch, Jens Sutter
	BREAK				
Stephanie Crosthwaite	Effects of Alcohols on Stabilization and Bundle Formation of Carbon Nanotubes in Aqueous Dispersions Stabilized by Surfactants	BSc Hons Mathematics and Physics	4	11:30 – 12:15pm	Maxim Fedorov, David Birch
Callum Shanks	Effects of Salts (Inorganic, Organic and Ionic Liquids) on Stabilization and Bundle Formation of Carbon Nanotubes in Liquid Dispersions	MPhys Physics	4	12:15 – 1:00pm	Maxim Fedorov, Neil Hunt
	LUNCH				
Sean O'Connor	Molecular Mechanisms of Biological Adaptation to Extreme Ionic Environments	BSc Hons Mathematics and Physics	4	2:00 – 2:45pm	Maxim Fedorov, Neil Hunt, David Palmer
Kelly Thomson	The effects of salt on the structure and dynamics of biomolecules	MPhys Physics	4	2:45 – 3:30pm	Maxim Fedorov, Neil Hunt, David Palmer
	BREAK				
Stephen Howorth	The Physics of DNA	MPhys Physics	4	3:45 – 4:30pm	Neil Hunt, Katrin Adamczyk, Glenn Burley

Tuesday 30th April 2013 - Chairman: Dr Adrian Cross, Col 3.20

Hannah Currie	Radiation Reaction	MPhys Physics	4	9:00 – 9:45am	Dino Jaroszynski, Adam Noble
Adam Mackie	Laser Wakefield Acceleration and Betatron Gamma Ray Radiation	BSc Hons Physics	4	9:45 – 10:30am	Dino Jaroszynski, Ranaul Islam
Megan Clark	Radiotherapy using Beams from Laser-plasma Accelerators	BSc Hons Mathematics and Physics	4	10:30 – 11:15am	Dino Jaroszynski, Silvia Cipiccia
	BREAK				
Caitlin Flynn	Radiotherapy using Beams from Laser-plasma Accelerators	BSc Hons Physics	4	11:30 – 12:15pm	Dino Jaroszynski, Silvia Cipiccia
Thomas Duffy	Sweep Frequency Microwave Pulse Compression using a Helically Corrugated Waveguide	BSc Hons Physics	4	12:15 – 1:00pm	Kevin Ronald, Wenlong He
	LUNCH				
Julia Souter	Ocean Colour Radiometry – Data Processing and Image Interpretation	MPhys Physics	4	2:00 – 2:45pm	Alex Cunningham, David McKee
Christopher McLaughlin	Quantitative Hyperspectral Beam Attenuation Meter	MPhys Physics	4	2:45 – 3:30pm	David McKee, Alex Cunningham
	BREAK				
Paul Quinn	Understanding the Optics of Marine Diatoms	BSc Hons Physics	4	3:45 – 4:30pm	Ben Hourahine, Francesco Papoff, Alex Cunningham
William Munnoch	Colour Digital Photography	MPhys Physics	4	4:30 – 5:15pm	Daniel Oi, Ben Hourahine

Wednesday 1st May 2013 - Chairman: Prof Erling Riis, JA 8.07

Student	Project	Degree	Year	Time	Supervisors
Daniel Keany	Helical Waves in Optical Cavities	BSc Hons Mathematics and Physics	4	9:00 – 9:45am	Gian-Luca Oppo, Alison Yao
Mark Boules	Interaction of Spatial Optical Solitons	MPhys Physics	4	9:45 – 10:30am	Gian-Luca Oppo, Willie Firth
Oliver Hay	Diffusion Distances in Complex Networks	MPhys Physics	4	10:30 – 11:15am	Ernesto Estrada, Gian-Luca Oppo
	BREAK				
Dominic Hunter	Bose Einstein Condensate (BEC) Simulations	MPhys Physics	4	11:30 – 12:15pm	Gordon Robb, Aidan Arnold
Andrew Mackellar	Bose Einstein Condensate (BEC) Simulations	MPhys Physics	4	12:15 – 1:00pm	Gordon Robb, Aidan Arnold
	LUNCH				
Richard Peddie	Fluctuations and Noise in Cold Atoms	MPhys Physics	4	2:00 – 2:45pm	Francesco Papoff, Gordon Robb
Christina Gilruth	Historical Physics Equipment	BSc Hons Physics with Teaching	4	2:45 – 3:30pm	Erling Riis, Kevin O'Donnell

Wednesday 1st May 2013 - Chairman: Prof Kevin O'Donnell, JA 8.24

Holly Little	Fabricating Amyloid Functional Materials for Artificial Photosynthesis	BSc Hons Physics	4	9:00 – 9:45am	Olaf Rolinski, Yu Chen
Damien McLaughlin	Intrinsic Fluorophores in Sensing Applications	MPhys Physics	4	9:45 – 10:30am	Olaf Rolinski, Yu Chen
Robbie Gordon	Optical Properties of ZnO Powder Doped with Lanthanide and Transition-metal Ions	BSc Hons Physics	4	10:30 – 11:15am	Tom Han, Olaf Rolinski
	BREAK				
Brian Chapman	Optical Properties of Nanoparticles	BSc Hons Physics	4	11:30 – 12:15pm	Yu Chen, Olaf Rolinski
John McLean	Energy Transfer as a Nanoscale Ruler	BSc Hons Physics with Teaching	4	12:15 – 1:00pm	Yu Chen, Olaf Rolinski

Wednesday 1st May 2013 - Chairman: Dr Adrian Cross, Col 3.20

Andrew Quinn	High Energy Ion Acceleration in Intense Laser-plasma Interactions	BSc Hons Physics	4	9:00 – 9:45am	Paul McKenna, Ross Gray
Isabel Pennock	Does D-Wave really have a Quantum Computer?	BSc Hons Physics	4	9:45 – 10:30am	John Jeffers, Daniel Oi
Lisa Blair	Quantum Cascade Laser Sensing of Gaseous Isotopes	MPhys Physics	4	10:30 – 11:15am	Nigel Langford, Geoff Duxbury
	BREAK				
Steven Drennan	Resonant and Non-resonant Optical Cavities	BSc Hons Physics	4	11:30 – 12:15pm	Nigel Langford, Geoff Duxbury
Andrew Watt	Quantum Cascade Laser Sensing of Gaseous Isotopes	MPhys Physics	4	12:15 – 1:00pm	Nigel Langford, Geoff Duxbury