

Student First Name	Student Last Name	Registration Number	Course	Title of Project	Chair	1 <sup>st</sup> Supervisor	Independent Marker	Category
Adam	Russell	201122032	MPhys	Modelling semiconductor nanostructures using a Schrödinger-Poisson-current	Kevin O'Donnell	Paul Edwards	Carol Trager-Cowan	Nanoscience
Anthony	Howley	201141434	BSc Hons Physics	Optical and conductivity mapping of InGaN LEDs	Kevin O'Donnell	Jochen Bruckbauer	Paul Edwards	Nanoscience
Scott Patrick	Deans	201111413	BSc Hons Physics	Image processing of electron channelling contrast patterns and electron chan	Kevin O'Donnell	Carol Trager-Cowan	Rob Martin	Nanoscience
Ross	Johnston	201123525	MPhys	Statistical analysis of defect distributions in semiconductor thin films	Kevin O'Donnell	Carol Trager-Cowan	Rob Martin	Nanoscience
Jordan	McSkeane	201114487	BSc Hons Physics	Spectroscopic Studies of Rare-earth ions doped in LiNbO <sub>3</sub>	Kevin O'Donnell	Tom Han	Ben Hourahine	Nanoscience
Stacey	Mitchell	201111285	MPhys	Laser Selective Excitation Studies of Nd <sup>3+</sup> doped mixed garnets	Kevin O'Donnell	Tom Han	Ben Hourahine	Nanoscience
David	Newton	201140501	MPhys	Spectroscopic Studies of Rare-earth ions doped in LiNbO <sub>3</sub>	Kevin O'Donnell	Tom Han	Ben Hourahine	Nanoscience
Aneurin	Harvey-Waugh	201141191	BSc Hons Physics	Gravitational ribbon-sensor modelling.	Kevin O'Donnell	Wayne McRae	Nick Lockerbie	Nanoscience
Jake	Arnott	201140268	BSc Hons Physics	Thermal modelling of a gravitational ribbon-sensor	Kevin O'Donnell	Wayne McRae	Nick Lockerbie	Nanoscience
Nicole	Hunter	201140323	BSc Hons Physics	Remote sensing of subsea light fields	Kevin O'Donnell	Alex Cunningham	Francesco Papoff	Nanoscience
Christopher	Hunter	201140569	BSc Hons Physics	Differential polarisation imaging for environmental applications	Kevin O'Donnell	Alex Cunningham	Francesco Papoff	Nanoscience
Robert	Liddell	201042892	BSc Hons Physics	Characterisation of irregular particles by optical microscopy and digital imagin	Kevin O'Donnell	Alex Cunningham	Francesco Papoff	Nanoscience
Caitlin Elizabeth	Firth	201116285	BSc Hons Physics	Intrinsic Fluorophores in Sensing Applications	Alex Cunningham	Olaf Rolinski	Neil Hunt	Nanoscience
Craig	Murray	201113871	BSc Hons Physics	Unusual fluorescence decays	Alex Cunningham	Olaf Rolinski	Neil Hunt	Nanoscience
Scott	Brown	200731862	BSc Hons Physics	Surface fluorescence	Alex Cunningham	David Birch	Olaf Rolinski	Nanoscience
Callum Ian	Runciman	201016281	BSc Hons Physics	Noble Metal Quantum Dots	Alex Cunningham	Yu Chen	David Birch	Nanoscience
Nathan	Dalgleish	201140292	BSc Hons Physics	Modelling of wettability of mineral surface by water and oil	Alex Cunningham	Maxim Fedorov	David Palmer	Nanoscience
Mark Stewart	Governo	201114673	MPhys	Predicting small molecule binding sites on protein surfaces	Alex Cunningham	Maxim Fedorov	David Palmer	Nanoscience
Elaine	Adair	201137451	MPhys	A Physical Investigation of Protein-drug Binding	Alex Cunningham	Neil Hunt	Maxim Fedorov	Nanoscience
Andrew	Farrell	201015528	MPhys	Uncovering the early stages of protein folding	Alex Cunningham	Neil Hunt	Maxim Fedorov	Nanoscience
Colin	McCann	201141167	MPhys	Observing beam propagation by fluorescence (b)	Stefan Kuhr	Aidan Arnold	Thorsten Ackemann	Optics
Wenbo	Li	201435304	MPhys	Automated optimisation of optical fibre coupling using microprocessor contro	Stefan Kuhr	Paul Griffin	Tom Han	Optics
Matteo	Demelas	201140315	MPhys	Single-shot, 3D reconstruction of the spatial profile of a laser beam	Stefan Kuhr	Paul Griffin	Nigel Langford	Optics
Nick	Bruce	201111463	BSc Hons Physics	Magnetic Field Stabilization with an Arduino Microprocessor	Stefan Kuhr	Elmar Haller	Tom Han	Optics
Kieran	MacRae	201110530	BSc Hons Physics	Measurement of the quality of the laser focus in a scanning optical microscop	Stefan Kuhr	Gail McConnell	Johanna Tragardh	Optics
James	Denholm	201140551	BSc Hons Physics	Non-resonant optical cavities	Stefan Kuhr	Nigel Langford	Alison Yao	Optics
Gregor	McDowall	201111764	MPhys	Chirp management of LEDs (experimental and computational)	Stefan Kuhr	Nigel Langford	Alison Yao	Optics
Steven	Russell	201111031	MPhys	Optical pumping of molecular gas lasers by QC Lasers (computational)	Stefan Kuhr	Nigel Langford	Alison Yao	Optics
Heather	Simmons	201140535	MPhys	Non-resonant optical cavities	Stefan Kuhr	Nigel Langford	Alison Yao	Optics
Jonathan	Wilkins	201119445	BSc Hons Physics	Thermal management of pulsed QC Lasers (computational)	Stefan Kuhr	Nigel Langford	Alison Yao	Optics
Mark	Carmichael	201121175	MPhys	Photonic materials and devices for Visible Light Communication (VLC)	Stefan Kuhr	Benoit Guilhabert	Nicolas Laurand	Optics
Jan Philipp	Hauser	201441143	ERASMUS	Neurophotonics systems for interfacing with the retina	Stefan Kuhr	Keith Mathieson	Niall McAlinden	Optics
Alan Ian	Brown	201122024	MPhys	Modelling laser-driven plasma expansion and ion acceleration dynamics	Adrian Cross	Paul McKenna	Zheng-Ming Sheng	Plasmas
Jonathan	Jarrett	201140462	MPhys	Design study on plasma optics	Adrian Cross	Paul McKenna	Zheng-Ming Sheng	Plasmas
Weicheng	He	201314655	BSc Hons Physics	Numerical simulation of laser interaction with dense magnetized plasma	Adrian Cross	Zheng-Ming Sheng	Paul McKenna	Plasmas
Madeleine Lesley	Richards	200945893	BSc Hons Physics	Autocorrelation using a GaAsP Photodiode for Beam-driven Plasma Wakefield	Adrian Cross	Bernhard Hidding	Silvia Cipiccia	Plasmas
Andrew Iain	Beaton	201140276	BSc Hons Physics	Beam-driven Plasma Wakefield Acceleration (PWFA)	Adrian Cross	Bernhard Hidding	Silvia Cipiccia	Plasmas
Gemma	King	201119403	MPhys	Medical Radio-isotope Production using a Laser-Plasma Wakefield Accelerator	Adrian Cross	Mark Wiggins	Bernhard Hidding	Plasmas

Craig	Murdoch	201140496	MPhys	Phase-contrast X-ray imaging using an X-ray source based on a laser-plasma accelerator	Adrian Cross	Silvia Cipiccia	Bernhard Hidding	Plasmas
Fraser	Addies	201140242	MPhys	Radiotherapy using Beams from Laser-plasma Accelerators	Adrian Cross	Xue Yang	Bernhard Hidding	Plasmas
Adam	Ross	201140519	MPhys	Laser Wakefield Acceleration and Betatron Gamma Ray Radiation	Adrian Cross	Ranau Islami	Zheng-Ming Sheng	Plasmas
Calum Peter	Bregazzi	201120064	BSc Hons Physics	Capillary Discharge Waveguides for Laser-Plasma Interactions	Adrian Cross	Mark Wiggins	Bernhard Hidding	Plasmas
Kyle	Roulston	201119225	MPhys	Electron Beam Transport and Diagnostics	Adrian Cross	Enrico Brunetti	Zheng-Ming Sheng	Plasmas
Alexandra	Reid	201110962	MPhys	High-Power Microwave Sources	Adrian Cross	Phil MacInnes	Bengt Eliasson	Plasmas
Erin	McAleese	201141272	MPhys	Cold atom-light interactions	Gian-Luca Oppo	Gordon Robb	Aidan Arnold	Theory
Steven	Lennox	201140349	MPhys	BEC simulations	Gian-Luca Oppo	Gordon Robb	Aidan Arnold	Theory
James	Dunn	201142040	BSc Hons Physics	Interactive Physics Simulations (PwT project)	Gian-Luca Oppo	Gordon Robb	Nigel Langford	Theory
Robert	Smith	201017368	BSc Hons Physics	Cold atom-light interactions	Gian-Luca Oppo	Gordon Robb	Aidan Arnold	Theory
Philip	Doyle	201237934	MPhys	Interaction of Spatial Optical Solitons	Gordon Robb	Gian-Luca Oppo	Thorsten Ackemann	Theory
Craig	Gordon	201014221	BSc Hons Physics	Dynamics of Coupled Laser Systems	Gordon Robb	Gian-Luca Oppo	Thorsten Ackemann	Theory
Mathias	Weisen	201111120	MPhys	Self-structuring and Optomechanics of Cold Atoms	Gordon Robb	Gian-Luca Oppo	Thorsten Ackemann	Theory
Michael Ritchie	Wilson	201041032	BSc Hons Physics	Simulations of Spin-Polarized Vertical-Cavity Surface-Emitting Lasers	Gordon Robb	Gian-Luca Oppo	Thorsten Ackemann	Theory
Samuel	Anderson	201140250	MPhys	Spiral Bandwidth Control in Optical Parametric Oscillators	Gordon Robb	Alison Yao	Francesco Papoff	Theory
Leon	Chan	201140446	MPhys	Ghost imaging and the Klyshko approach	Gordon Robb	John Jeffers	Marco Piani	Theory
Christopher	Campbell	201142024	BSc Hons Physics	Resonances in clouds of cold atoms	Gordon Robb	Francesco Papoff	Ben Hourahine	Theory
Lucy	Luecke	201441151	ERASMUS	Parametric Oscillators	Gordon Robb	Francesco Papoff	Alison Yao	Theory
Ian	Shanks	201118041	BSc Hons Physics	Surface Fields in Layered Nano Particles	Gordon Robb	Francesco Papoff	Ben Hourahine	Theory
Karen	Wallace	201207028	MPhys	Dynamics of impurity atom coupled to a quantum gas	John Jeffers	Andrew Daley	Alexandre Tacla	Theory
Gwen	Morris	201140470	MPhys	Transport dynamics of quantum gases in optical potentials	John Jeffers	Andrew Daley	Suzanne McEndoo	Theory
Benjamin	Ross	201204779	MPhys	Quantifying quantum steering via semidefinite programming	John Jeffers	Marco Piani	Daniel Oi	Theory
Josh	Robertson	200840302	BSc Hons Physics	Satellite free-space optics for quantum communication	John Jeffers	Daniel Oi	John Jeffers	Theory
Matthew	Brown	201135116	MPhys	Computational modelling of X-ray Free electron Lasers	Paul McKenna	Brian McNeil	Kevin Ronald	Theory
Martyn	Hunter	201142032	BSc Hons Physics	Resonant Electron Beam-light Interactions	Paul McKenna	Brian McNeil	Bengt Eliasson	Theory
Scott	Thomas	201107286	MPhys	ERASMUS, then Computational modelling of X-ray Free electron Lasers	Paul McKenna	Brian McNeil	Kevin Ronald	Theory