

PH450 Project Allocation: 1st Round

Name	Course	Project Title	1st Supervisor
Steven McClue	201407904 BSc Hons M&Phys	Nonlinear waves in plasmas	Adam Noble
Stewart Jackson	201415493 MPhys	Characterisation of diamond for laser applications	Alan Kemp
Ross Quinn	201427636 BSc Hons Phys	Understanding how to exploit diamond in solid-state lasers	Alan Kemp
Calum Angus	201335423 BSc Hons PwT	Simulations of the Demonstration of Ionisation Cooling Experiment	Alan Young
Tom Catto	201405003 MPhys	Helical waves in optical cavities for quantum communication	Alison Yao
Sean Patrick Love	201417738 BSc Hons Phys	Nonlinear Propagation of Structured Light	Alison Yao
Seoras Kinanis	201430566 MPhys	Quantum interference and boson sampler verification	Andrew Daley
James Campbell O'Brien	201427767 BSc Hons Phys	Magnetic states with long-range interactions	Andrew Daley
Josh Wade	201418784 MPhys	Photonic Neurons: Spiking information processing with lasers	Antonio Hurtado
Emily Louise Cannon	201411298 MPhys	Computing the inverse square law	Ben Hourahine
Elise Daffurn	201445422 BSc Hons Phys	Twisted Nanostructures	Ben Hourahine
David James Moir	201409979 BSc Hons Phys	Stochastic Particle Heating of Charged Particles by Plasma Waves	Bengt Eliasson
Rachel Campbell	201411873 MPhys	Monte Carlo Modelling of Particle Beam-Matter Interaction	Bernhard Hidding
Mark Anthony Kelly	201427385 MPhys	Electron beam physics and transport modelling	Bernhard Hidding
Jamie Lee McWilliam	201449531 MPhys	Space Radiation Reproduction and Testing	Bernhard Hidding
Stuart Rutherford	201449450 BSc Hons Phys	Space Radiation Reproduction and Testing	Bernhard Hidding
Andrew Anderson	201424905 BSc Hons Phys	The theory of X-ray Free electron Lasers	Brian McNeil
Elliot Brown	201425202 BSc Hons Phys	The scientific applications of X-ray Free Electron Lasers	Brian McNeil
Alasdair William Thomas McCourt	201449400 BSc Hons Phys	Computational Modelling of X-ray Free Electron Lasers	Brian McNeil
Alistair Burns	201547258 MPhys	Investigation of Polytypism in nitride semiconductors	Carol Trager-Cowan
Daniel Martin Waters	201413556 MPhys	Investigation of Polytypism in nitride semiconductors	Carol Trager-Cowan
Stuart Geddes	201449353 BSc Hons Phys	Acquisition, Pointing, and Tracking for CubeSat QKD	Daniel Oi
Julie Bryce Reddie	201410439 BSc Hons Phys	Gravity Gradiometry with Satellite Constellations	Daniel Oi
Jennifer Louise McQueen	201516427 MPhys	Radiation Reaction	Dino Jaroszynski
Daniel Alasdair Thiagaraja	201617005 MPhys	Nonlinear Vacuum Electrodynamics	Dino Jaroszynski
Edward Ballantyne	201425618 BSc Hons Phys	Implementation and characterization of optical lattice potentials for ultracold atoms	Elmar Haller
James Twaddle	201441884 BSc Hons Phys	Design and Construction of a Fabry-Perot Scanning Interferometer	Elmar Haller
Brian McCormack	201306288 BSc Hons Phys	Using angular momentum of light to detect particles in fluids	Francesco Papoff
Ellis Cuthbertson	201420553 MPhys	Moving a standing wave with an electronically controlled piezo-mirror device	Gail McConnell
Alexandros Irwin	201404591 MPhys	Making light-sheets for microscopy and mesoscopy	Gail McConnell
Declan Percival	201316788 BSc Hons Phys	Quantification and measurement of marine microbial populations using the Mesolens	Gail McConnell

Magdalena Joanna	Carroll	201238485	BSc Hons M&Phys	Opto-mechanics of Bose-Einstein Condensates in Optical Cavities	Gian-Luca Oppo
Callum	Ferguson	201448886	BSc Hons M&Phys	Cold Atom-Light Interactions	Gordon Robb
Daniel Mark	Smith	201313764	BSc Hons Phys	Interactive Physics Simulations	Gordon Robb
Jake Nicholas	Vandeville	201747337	Erasmus	Four-wave Mixing in Atomic Gases	Gordon Robb
Dylan Bryan	Anderson	201424913	BSc Hons Phys	Quantum applications of Semiconductor Disk Lasers	Jennifer Hastie
Robbie	Salmond	201449468	MPhys	Colour stability of LEDs from the red to the UV	Jochen Bruckbauer
Declan	Reid	201404607	BSc Hons Phys	Creation and control of continuous-mode optical superposition qubits	John Jeffers
Mollie	Scott	201449557	MPhys	Neurophotonic Systems for Interfacing with the Retina	Keith Mathieson
Sam	Graham	201313756	BSc Hons Phys	Phosphorescence of glowstones™	Kevin O'Donnell
Sean	Webster	201426525	MPhys	RE-doped III-nitrides for solid state lighting applications	Kevin O'Donnell
Christopher John Gordon	Wilson	201516401	MPhys	Simulation of Langmuir probes and sheaths in plasma	Kevin Ronald
Allan Peter	Brown	201411203	MPhys	Floquet theory for trapped atoms in optical lattices.	Luca Tagliacozzo
Connor Mclean	Bintener	201444442	BSc Hons M&Phys	Quantifying the resources of global quantum evolutions and measurements	Marco Piani
Ciaran Edward	Lavan	201424492	BSc Hons M&Phys	Distinguishability of quantum states	Marco Piani
Dawn	Bruce	201422521	MPhys	Medical Radioisotope Production using a Laser-Plasma Wakefield Accelerator	Mark Wiggins
John	Bommer	201415689	MPhys	Development of a highly accurate alignment process for multi-stage laser lithography	Michael Strain
Gary	Doak	201426973	MPhys	A Physical Investigation of Protein-drug Binding	Neil Hunt
Grant Andrew	O'Hare	201502488	MPhys	Uncovering the Early Stages of Protein Folding	Neil Hunt
Michael	Brodie	201342315	MPhys	Atomic Processes for Astrophysical Plasmas	Nigel Badnell
Lorne Magnus James	McLafferty	201449426	MPhys	Nonlinear Optical Loop Mirrors Based on 3 X 3 fibre optic couplers	Nigel Langford
Ben	Stevenson	201447628	MPhys	Investigation of multi-modal flex-tentional transducers	Nigel Langford
Philip Andrew	Hamilton	201410697	MPhys	Pathological modifications in proteins detected by their intrinsic fluorescence	Olaf Rolinski
Cameron	Maclure	201412851	MPhys	Pathological modifications in proteins detected by their intrinsic fluorescence	Olaf Rolinski
Rachael	Lesniewska	201509008	BSc Hons M&Phys	Large scale lattice-Boltzmann simulation of colloid-liquid crystal composite materials	Oliver Henrich
Jack Edward	McCallum	201409962	BSc Hons Phys	Signal processing for Atomic Magnetometry	Paul Griffin
Anujan	McLaughlin	201427270	MPhys	Grating Magneto-Optical Trap experiments	Paul Griffin
William Stuart	Steven	201418425	BSc Hons Phys	A Polarisation Analyser for Quantum Optics Experiments	Paul Griffin
Jilles	Valk	201438661	MPhys	Modelling relativistic electron motion in spatially varying intense laser fields	Paul McKenna
Victor	Williamson	201424484	BSc Hons Phys	High power laser-driven X-ray sources in dense plasma	Paul McKenna
Ewan Cameron	Earle	201449311	MPhys	Investigating non-ideal behaviour in current-voltage curves from GaN-based LEDs	Robert Martin
Dale Mark	Highton	201419625	MPhys	An ultrafast, time-resolving ion spectrometer as a diagnostic of intense laser-plasma dynamics	Ross Gray
David	Hunter	201425105	BSc Hons Phys	Intense Laser Pulse Filamentation in Near Critical Density Plasmas	Ross Gray
Murray	Jordan	201449565	MPhys	Three-Dimensional Single-Molecule Based Super-Resolution Imaging	Sebastian van de Linde
Kieran James	McFarlane	201449573	BSc Hons Phys	mRNA nanoparticles for cancer detection	Yu Chen

Stuart Alexander	Archibald	201344480	BSc Hons Phys
Philippa	Benson	201411148	BSc Hons Phys
Michael	Boyle	201342307	BSc Hons Phys
Scott	Clarkson	201348337	BSc Hons Phys
Helena Mary	Glass	201449492	MPhys
Louise Michelle	MacDonald	201407961	BSc Hons Phys
Cameron	MacLean	201401402	BSc Hons Phys
Kieran	McCrory	201416431	BSc Hons Phys
Jack	Preston	201417568	BSc Hons Phys
Sean	Sloan	201342797	BSc Hons Phys
Ahna Marguerite	Taylor	201314451	BSc Hons Phys