

PH450 Project Allocation: 1st Round

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

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