PH450 Project Allocation DRAFT A

Surname	First name	ID	Project Title	Supervisor	Independent	Chair
Reynolds	Euan	ER1	A Paul trap for macroscopic charged particles	Erling Riis	Jonathan Pritchard	Aidan Arnold
Cree	Jamie	SI1	Building a laser-pumped atomic magnetometer	Stuart Ingleby	Susan Spesyvtseva	Aidan Arnold
McKay	Kieran	SI1	Building a laser-pumped atomic magnetometer	Stuart Ingleby	Susan Spesyvtseva	Aidan Arnold
Merrett	Lorna	SS1	Innovation of a novel wearable phototherapy technology for healthcare	Susan Spesyvtseva	Brian Patton	Alan Kemp
Brown	Eve	JP2	A Rydberg Atom Radio	Jonathan Pritchard	Elmar Haller	Alan Kemp
McVey	Michael	PK1	Quantum chaos with light-matter interactions	Peter Kirton	Alison Yao	Andrew Daley
Johnstone	Amy	GRMR1	Cold Atom-Light Interactions	Gordon Robb	Kali Wilson	Andrew Daley
Gerblich	Lasse	VK1	Quantum Computing with Quantum Versions of Random Walks	Viv Kendon	Peter Kirton	Andrew Daley
Terävä	Mandi	VK1	Quantum Computing with Quantum Versions of Random Walks	Viv Kendon	Peter Kirton	Andrew Daley
Dyer	Courtney	PG2	A quantum magnetometer to measure human bio-signals	Paul Griffin	James McGilligan	Antonio Hurtado
Gray	David	PG1	Laser technologies for cold atom physics.	Paul Griffin	James McGilligan	Antonio Hurtado
Melrose	Dylan	PM1	Field Probe Diagnostics for High-Power Microwave Applications	Philip MacInnes	Ross Gray	Bengt Eliasson
Strachan	William	KR1	Parametric Scattering and Coupling of Microwaves in Plasma	Kevin Ronald	Bernhard Ersfeld	Brian McNeil
Houch	Christian	MW1	Focusing electron beams from a laser-plasma wakefield accelerator	Mark Wiggins	Liang Zhang	Brian McNeil
Moles	Alasdair	YC2	Plasmon enhanced fluorescence	Yu Chen	Ben Hourahine	Brian Patton
Vohníková	Veronika	SK1	Dynamical DMD potentials	Stefan Kuhr	Kali Wilson	Brian Patton
Wang	Xin	PE2	Electron microscope analysis of semiconductor alloys	Paul Edwards	Alessandro Rossi	Carol Trager-Cowan
Cundy	Oliver	DMcK3	Developing new optics experiments for undergraduate teaching labs	David McKee	Helen Vaughan	Carol Trager-Cowan
Carey	Andrew	RWM1	Simulation and measurement of X-ray microanalysis of semiconductors	Robert Martin	Jennifer E. Hastie	Carol Trager-Cowan
Rowan	Megan	HV1	TBA	Helen Vaughan	Alison Yao	Daniel Oi
O'Neill	Adam	BWJM1	Computational Modelling of X-ray Free Electron Lasers	Brian McNeil	Enrico Brunetti	Daniel Oi
Ghani	Zubair	BWJM1	Computational Modelling of X-ray Free Electron Lasers	Brian McNeil	Martin O'Mullane	Daniel Oi
Dolan	Aidan	LC1	Detection of photonic correlations with a single-photon detector	Lucia Caspani	Nicolas Laurand	Daniel Oi
Stevenson	Grant	TF1	Spectral analysis of experimentally measured back-reflected laser light from solid-density plasma targets	Timothy Frazer	Ross Gray	Daniel Oi
Hulme	Colin	JH1	Nanosecond pulsed light-emitting diodes	Johannes Herrnsdorf	Terry Dyer	Daniel Oi
MacDonald	Connor	GMcC2	Disruption of mature colony biofilms using magnetic fields	Gail McConnell	Liang Zhang	David McKee
Bolton	Louise	GMcC3	A device for in situ imaging of voice prosthetic devices	Gail McConnell	Niall McAlinden	David McKee

Uras	Aurora	MK1	Spectral properties of reflected laser light from expanding plasma targets	Martin King	Bengt Eliasson	Dino Jaroszynski
Hurrell	Louis	BE1	Stochastic particle heating of charged particles by plasma waves	Bengt Eliasson	Craig Donaldson	Dino Jaroszynski
Wilson	James	CD1	Investigation of a Microwave undulator for a Free-Electron Laser	Craig Donaldson	David Speirs	Dino Jaroszynski
Hunter	Myles	TA1	A laser system for Rb spectroscopy	Thorsten Ackemann	Carolyn O'Dwyer	Elmar Haller
Naismith	Lewis	TA2	Spintronics in vertical-cavity gain structures	Thorsten Ackemann	Stuart Ingleby	Elmar Haller
Kolesnikovs	Vitalijs	AJK1	Diode Laser Beam Conditioning for pumping Ti:sapphire lasers	Alan Kemp	Johannes Herrnsdorf	Erling Riis
McKay	Lewis	AJK1	Diode Laser Beam Conditioning for pumping Ti:sapphire lasers	Alan Kemp	Johannes Herrnsdorf	Erling Riis
Shen	Yujun	JB1	Building crystal models for backscatter electron diffraction studies	Jochen Bruckbauer	Douglas Cameron	Francesco Papoff
Kirby	Emma	AMY1	Control of spatially rotating structures in diffractive Kerr cavities	Alison Yao	Gordon Robb	Gian-Luca Oppo
Blacklock	Maximus	MS1	Unclonable physical encryption using photonic chips	Michael Strain	Nicolas Laurand	Gian-Luca Oppo
Bathgate	Euan	JJ1	Quantum Lidar	John Jeffers	Thomas Brougham	Gian-Luca Oppo
Ji	Jialu	YC1	Optical properties of metal-dielectric nanocomposites	Yu Chen	Lucia Caspani	Gordon Robb
Kumar	Yash Susir	GMcC1	Optical characterisation of 3D printed lenses	Gail McConnell	Peter Tinning	Gordon Robb
Wallace	Ruairidh	DMcK2	Modelling impact of zooplankton on ocean colour remote sensing signals	David McKee	Brian Patton	Jennifer E. Hastie
Smith	Scott	RWM2	Investigation of green-emitting quantum wells	Robert Martin	Elmar Haller	Jennifer E. Hastie
Tallett	Kern	LC2	Simulation of quantum photonic systems with Strawberry Fields	Lucia Caspani	Nicolas Laurand	Jennifer E. Hastie
Scott	Finlay	AMY2	Structured light and BECs	Alison Yao	Francesco Papoff	John Jeffers
Damezin	Kian	CDu1	Harnessing non-adiabatic quantum dynamics	Callum Duncan	Robert Cameron	John Jeffers
Drover	Murray	PKh1	Electrical control of spin qubits in Silicon Carbide (SiC)	Prince Khatri	Konstantinos Lagoudakis	Jonathan Pritchard
Campbell	Aidan	FM3	Fabrication of low-cost and tuneable UV detectors	Fabien Massabuau	Huimin Zhu	Konstantinos Lagoudakis
Guo	Xiaoyu	FM1	How to measure the bandgap energy of wide bandgap semiconductors?	Fabien Massabuau	Paul Griffin	Konstantinos Lagoudakis
Brady	Matthew	BEr1	Ion Channel Laser with Large Oscillation Amplitude	Bernhard Ersfeld	Philip MacInnes	Mark Wiggins
Black	Dylan	AH2	Spiking neurons with resonant tunneling diodes for high speed and energy efficient neuromorphic nanophotonic computing	Antonio Hurtado	Alan Kemp	Michael Strain
Dennison	Bethany	AH1	Photonic neurons with lasers for ultrafast brain-inspired computing	Antonio Hurtado	Jonathan McKendry	Michael Strain
McAloon	Ethan	JM1	Chip-scale atomic metrology	James McGilligan	Kali Wilson	Michael Strain
Campbell	Jamie	BH1	Twisted nano structures	Ben Hourahine	Oliver Henrich	Nigel Badnell
Ferguson	Niamh	NRB2	Atomic Processes for Astrophysical Plasmas II	Nigel Badnell	Colin Whyte	Paul McKenna
Hay	Ethan	NRB1	Atomic Processes for Astrophysical Plasmas I	Nigel Badnell	Colin Whyte	Paul McKenna
Mitchell	Allan	AM1	Electron beam em-wave periodic surface lattice interactions	Amy MacLachlan	Mark Wiggins	Paul McKenna
Philip Mathew	Calvin	NM1	Thermal measurement and modelling of neural microLED probes	Niall McAlinden	Alessandro Rossi	Thorsten Ackemann

Ruddy	Aidan	JMcK1	Photon propagation through scattering and absorbing media	Jonathan McKendry	Paul Griffin	Thorsten Ackemann
Rayer	Clement	KW1	Arduino-based laser stabilisation	Kali Wilson	Robbie Wilson	Thorsten Ackemann
Howie	Toby	PE1	Web-based electron diffraction tool	Paul Edwards	Oliver Henrich	Viv Kendon
Mitchell	Jack	BP2	LED arrays for differential phase contrast microscopy	Brian Patton	Arthur La Rooij	Yu Chen