

# PH450 Viva Schedule Ver.3.1

| Family Name | First Name  | Project Title                                                                                   | Viva Date  | Time  | Supervisor             | Indep Marker           | Chair              | Room   |
|-------------|-------------|-------------------------------------------------------------------------------------------------|------------|-------|------------------------|------------------------|--------------------|--------|
| Cannon      | Rachel      | Computing the inverse square law                                                                | 20/04/2018 | 10:00 | Ben Hourahine          | David McKee            | Carol Trager-Cowan | JA2.08 |
| Daffurn     | Andrew      | Twisted Nanostructures                                                                          | 20/04/2018 | 10:45 | Ben Hourahine          | Brian Patton           | Carol Trager-Cowan | JA2.08 |
| MacLean     | Cameron     | Plasma optical modulators for intense lasers                                                    | 20/04/2018 | 10:00 | Zhengming Sheng        | Brian McNeil           | Dino Jaroszynski   | JA7.16 |
| Carroll     | Mark        | Opto-mechanics of Bose-Einstein Condensates in Optical Cavities                                 | 23/04/2018 | 10:00 | Gian-Luca Oppo         | Marco Piani            | Ben Hourahine      | JA6.22 |
| Ferguson    | Alistair    | Cold Atom-Light Interactions                                                                    | 23/04/2018 | 10:45 | Gordon Robb            | Antonio Hurtado        | Ben Hourahine      | JA6.22 |
| Salmond     | Ben         | Colour stability of LEDs from the red to the UV                                                 | 26/04/2018 | 10:00 | Jochen Bruckbauer      | Paul Edwards           | Ben Hourahine      | JA6.22 |
| Scott       | Philip      | Neurophotonic Systems for Interfacing with the Retina                                           | 30/04/2018 | 10:00 | Keith Mathieson        | Jonathan Pritchard     | Alan Kemp          | TBA    |
| Bintener    | Tom         | Quantifying the resources of global quantum evolutions and measurements                         | 30/04/2018 | 10:00 | Marco Piani            | Luca Tagliacozzo       | Andrew Daley       | JA7.06 |
| Lavan       | Declan      | Distinguishability of quantum states                                                            | 30/04/2018 | 10:45 | Marco Piani            | Luca Tagliacozzo       | Andrew Daley       | JA7.06 |
| Love        | Callum      | Nonlinear Propagation of Structured Light                                                       | 30/04/2018 | 14:00 | Alison Yao             | Michael Strain         | Gian-Luca Oppo     | JA7.01 |
| Kinanis     | Alexandros  | Quantum interference and boson sampler verification                                             | 30/04/2018 | 14:00 | Andrew Daley           | Jonathan Pritchard     | John Jeffers       | JA7.03 |
| Thiagaraja  | Anujan      | Nonlinear Vacuum Electrodynamics                                                                | 30/04/2018 | 14:00 | Adam Noble             | Bernhard Ersfeld       | Nigel Badnell      | JA8.24 |
| McClue      | Dylan       | Nonlinear waves in plasmas                                                                      | 30/04/2018 | 10:00 | Adam Noble             | Mark Wiggins           | Zhengming Sheng    | JA7.16 |
| Brodie      | Seoras      | Atomic Processes for Astrophysical Plasmas                                                      | 30/04/2018 | 10:45 | Nigel Badnell          | Bernhard Ersfeld       | Zhengming Sheng    | JA7.16 |
| McCourt     | Declan      | Computational Modelling of X-ray Free Electron Lasers                                           | 30/04/2018 | 11:30 | Brian McNeil           | Luca Tagliacozzo       | Zhengming Sheng    | JA7.16 |
| Ballantyne  | Calum       | Implementation and characterization of optical lattice potentials for ultracold atoms           | 03/05/2018 | 14:00 | Elmar Haller           | Sebastian van de Linde | Alison Yao         | JA7.08 |
| Vandeville  | Victor      | Four-wave Mixing in Atomic Gases                                                                | 03/05/2018 | 14:45 | Gordon Robb            | Antonio Hurtado        | Alison Yao         | JA7.08 |
| Irwin       | Edward      | Making light-sheets for microscopy and mesoscopy                                                | 03/05/2018 | 10:00 | Gail McConnell         | Jennifer Hastie        | Carol Trager-Cowan | JA2.08 |
| Preston     | Jack        | Long range entanglement in a hybrid atom-superconductor quantum processor                       | 03/05/2018 | 14:00 | Jonathan Pritchard     | Jennifer Hastie        | Daniel Oi          | JA7.12 |
| Wilson      | Kieran      | Simulation of Langmuir probes and sheaths in plasma                                             | 03/05/2018 | 14:00 | Kevin Ronald           | Bernhard Ersfeld       | Dino Jaroszynski   | JA7.16 |
| Hamilton    | Julie       | Pathological modifications in proteins detected by their intrinsic fluorescence                 | 03/05/2018 | 14:00 | Olaf Rolinski          | Paul Edwards           | Neil Hunt          | JA8.24 |
| Jackson     | James       | Quantum Dots TBC                                                                                | 03/05/2018 | 14:45 | Olaf Rolinski          | Paul Edwards           | Neil Hunt          | JA8.24 |
| Maclure     | Daniel      | Pathological modifications in proteins detected by their intrinsic fluorescence                 | 03/05/2018 | 15:30 | Olaf Rolinski          | Paul Edwards           | Neil Hunt          | JA8.24 |
| McQueen     | Christopher | Radiation Reaction                                                                              | 03/05/2018 | 10:00 | Adam Noble             | Bernhard Ersfeld       | Nigel Badnell      | JA8.24 |
| McLafferty  | Sam         | Nonlinear Optical Loop Mirrors Based on 3 X 3 fibre optic couplers                              | 03/05/2018 | 10:00 | Nigel Langford         | Sebastian van de Linde | Stefan Kuhr        | JA8.19 |
| McCallum    | Jake        | Signal processing for Atomic Magnetometry                                                       | 03/05/2018 | 10:45 | Paul Griffin           | Elmar Haller           | Stefan Kuhr        | JA8.19 |
| McLaughlin  | Sean        | Grating Magneto-Optical Trap experiments                                                        | 03/05/2018 | 11:30 | Paul Griffin           | Elmar Haller           | Stefan Kuhr        | JA8.19 |
| Steven      | Rachael     | A Polarisation Analyser for Quantum Optics Experiments                                          | 03/05/2018 | 12:15 | Paul Griffin           | Elmar Haller           | Stefan Kuhr        | JA8.19 |
| Burns       | Elise       | Investigation of Polytypism in nitride semiconductors                                           | 04/05/2018 | 10:00 | Carol Trager-Cowan     | Yu Chen                | Robert Martin      | JA8.07 |
| Waters      | Dale        | Investigation of Polytypism in nitride semiconductors                                           | 04/05/2018 | 10:45 | Carol Trager-Cowan     | Yu Chen                | Robert Martin      | JA8.07 |
| Bruce       | Emily       | Medical Radioisotope Production using a Laser-Plasma Wakefield Accelerator                      | 08/05/2018 | 10:45 | Mark Wiggins           | Wenlong He             | Adrian Cross       | JA6.19 |
| Clarkson    | Scott       | Design and Measurement of a Mode Converter for a Microwave Amplifier                            | 08/05/2018 | 11:30 | Wenlong He             | Alan Young             | Adrian Cross       | JA6.19 |
| MacDonald   | Louise      | Design of a Brewster Window for a W-band Gyro-TWA                                               | 08/05/2018 | 12:15 | Wenlong He             | Alan Young             | Adrian Cross       | JA6.19 |
| McCormack   | Robbie      | Using angular momentum of light to detect particles in fluids                                   | 08/05/2018 | 10:45 | Francesco Papoff       | Antonio Hurtado        | Aidan Arnold       | JA8.22 |
| Earle       | Alasdair    | Investigating non-ideal behaviour in current-voltage curves from GaN-based LEDs                 | 08/05/2018 | 12:15 | Robert Martin          | Antonio Hurtado        | Aidan Arnold       | JA8.22 |
| Anderson    | Steven      | Quantum applications of Semiconductor Disk Lasers                                               | 08/05/2018 | 14:00 | Jennifer Hastie        | Jonathan Pritchard     | Alan Kemp          | TBA    |
| Brown       | Josh        | Floquet theory for trapped atoms in optical lattices.                                           | 08/05/2018 | 14:45 | Luca Tagliacozzo       | Jonathan Pritchard     | Alison Yao         | JA7.08 |
| Taylor      | Ahna        | Hysteretic Photochromic Switching (HPS) of europium-magnesium (Eu-Mg) defects in GaN            | 08/05/2018 | 14:00 | Kevin O'Donnell        | David McKee            | Brian Patton       | JA6.05 |
| Percival    | John        | Quantification and measurement of marine microbial populations using the Mesolens               | 08/05/2018 | 14:45 | Gail McConnell         | Brian Patton           | Francesco Papoff   | JA7.10 |
| Jordan      | Brian       | Three-Dimensional Single-Molecule Based Super-Resolution Imaging                                | 08/05/2018 | 10:45 | Sebastian van de Linde | Yu Chen                | Gail McConnell     | JA6.15 |
| Stevenson   | Jack        | Investigation of multi-modal flex-tentional transducers                                         | 08/05/2018 | 11:30 | Francesco Papoff       | Alan Kemp              | Gail McConnell     | JA6.15 |
| Brown       | James       | The scientific applications of X-ray Free Electron Lasers                                       | 08/05/2018 | 15:30 | Brian McNeil           | Luca Tagliacozzo       | Gian-Luca Oppo     | JA7.01 |
| Quinn       | Gary        | Understanding how to exploit diamond in solid-state lasers                                      | 08/05/2018 | 14:45 | Alan Kemp              | Paul Griffin           | Keith Mathieson    | TBA    |
| Wade        | Ewan        | Photonic Neurons: Spiking information processing with lasers                                    | 08/05/2018 | 15:30 | Antonio Hurtado        | Gordon Robb            | Keith Mathieson    | TBA    |
| Doak        | Elliot      | A Physical Investigation of Protein-drug Binding                                                | 08/05/2018 | 10:45 | Neil Hunt              | Olaf Rolinski          | Kevin O'Donnell    | JA7.32 |
| O'Hare      | Dawn        | Uncovering the Early Stages of Protein Folding                                                  | 08/05/2018 | 11:30 | Neil Hunt              | Olaf Rolinski          | Kevin O'Donnell    | JA7.32 |
| Cuthbertson | Stuart      | Moving a standing wave with an electronically controlled piezo-mirror device                    | 08/05/2018 | 10:00 | Gail McConnell         | Brian Patton           | Robert Martin      | JA8.07 |
| Kelly       | Ellis       | Electron beam physics and transport modelling                                                   | 09/05/2018 | 12:15 | Bernhard Hidding       | Martin King            | Adrian Cross       | JA6.19 |
| Twaddle     | William     | Design and Construction of a Fabry-Perot Scanning Interferometer                                | 09/05/2018 | 10:45 | Elmar Haller           | Sebastian van de Linde | Andrew Daley       | JA7.06 |
| Galbraith   | Connor      | Numerical simulation of cyclotron maser amplifiers                                              | 09/05/2018 | 14:00 | Kevin Ronald           | Martin King            | Bernhard Hidding   | JA7.21 |
| Sloan       | Sean        | Design and simulation of a millimetre wave source based on a pseudospark produced electron beam | 09/05/2018 | 10:00 | Adrian Cross           | Wenlong He             | Kevin Ronald       | JA7.32 |
| Rutherford  | Lorne       | Space Radiation Reproduction and Testing                                                        | 09/05/2018 | 10:45 | Bernhard Hidding       | Daniel Oi              | Kevin Ronald       | JA7.32 |
| McCrory     | Kieran      | Ion Channel Laser with Large Oscillation Amplitude                                              | 09/05/2018 | 11:30 | Bernhard Ersfeld       | Brian McNeil           | Kevin Ronald       | JA7.32 |
| Campbell    | David       | Monte Carlo Modelling of Particle Beam-Matter Interaction                                       | 09/05/2018 | 10:00 | Bernhard Hidding       | Brian McNeil           | Nigel Badnell      | JA7.32 |
| Boyle       | Michael     | Simulations of the Demonstration of Ionisation Cooling Experiment                               | 09/05/2018 | 10:45 | Alan Young             | Mark Wiggins           | Nigel Badnell      | JA7.32 |
| Graham      | Stuart      | Phosphorescence of glowstones™                                                                  | 09/05/2018 | 10:45 | Kevin O'Donnell        | David McKee            | Robert Martin      | JA8.07 |
| Webster     | David       | RE-doped III-nitrides for solid state lighting applications                                     | 09/05/2018 | 11:30 | Kevin O'Donnell        | David McKee            | Yu Chen            | JA6.07 |

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| Anderson   | Stewart   | Astigmatic mirror multipass absorption cells for long path length spectroscopy                 | 10/05/2018 | 10:00 | Nigel Langford   | Sebastian van de Linde | Stefan Kuhr      | JA8.19 |
| Smith      | Cameron   | Interactive Physics Simulations                                                                | 14/05/2018 | 10:00 | Gordon Robb      | Oliver Henrich         | Aidan Arnold     | JA8.22 |
| Geddes     | Daniel    | Acquisition, Pointing, and Tracking for CubeSat QKD                                            | 14/05/2018 | 14:00 | Daniel Oi        | Oliver Henrich         | Alison Yao       | JA7.08 |
| Valk       | Jilles    | Modelling relativistic electron motion in spatially varying intense laser fields               | 14/05/2018 | 09:30 | Paul McKenna     | Alan Young             | Bengt Eliasson   | JA6.16 |
| Highton    | Jennifer  | An ultrafast, time-resolving ion spectrometer as a diagnostic of intense laser-plasma dynamics | 14/05/2018 | 10:15 | Paul McKenna     | Mark Wiggins           | Bengt Eliasson   | JA6.16 |
| Hunter     | Daniel    | Intense Laser Pulse Filamentation in Near Critical Density Plasmas                             | 14/05/2018 | 11:00 | Paul McKenna     | Mark Wiggins           | Bengt Eliasson   | JA6.16 |
| McFarlane  | Mollie    | mRNA nanoparticles for cancer detection                                                        | 14/05/2018 | 12:15 | Yu Chen          | Oliver Henrich         | David McKee      | JA6.25 |
| Reddie     | Grant     | Gravity Gradiometry with Satellite Constellations                                              | 14/05/2018 | 14:45 | Daniel Oi        | Oliver Henrich         | John Jeffers     | JA7.03 |
| Lesniewska | Magdalena | Large scale lattice-Boltzmann simulation of colloid-liquid crystal composite materials         | 14/05/2018 | 15:30 | Oliver Henrich   | Brian Patton           | John Jeffers     | JA7.03 |
| Moir       | Connor    | Stochastic Particle Heating of Charged Particles by Plasma Waves                               | 14/05/2018 | 11:45 | Bengt Eliasson   |                        | Paul McKenna     | JA8.08 |
| Glass      | Helena    | Grating magneto-optical trap modelling                                                         | 15/05/2018 | 14:00 | Aidan Arnold     | Michael Strain         | Daniel Oi        | JA7.12 |
| O'Brien    | Ciaran    | Magnetic states with long-range interactions                                                   | 15/05/2018 | 14:45 | Andrew Daley     | Michael Strain         | John Jeffers     | JA7.03 |
| Bommer     | Sean      | Development of a highly accurate alignment process for multi-stage laser lithography           | 15/05/2018 | 12:15 | Michael Strain   | Paul Griffin           | Keith Mathieson  | TBA    |
| Benson     | Philippa  | Simulations of magnetic turbulence in plasma                                                   | 18/05/2018 | 10:00 | Bengt Eliasson   |                        | Dino Jaroszynski | JA7.16 |
| Williamson | Murray    | High power laser-driven X-ray sources in dense plasma                                          | 18/05/2018 | 10:45 | Paul McKenna     |                        | Dino Jaroszynski | JA7.16 |
| McWilliam  | Allan     | Space Radiation Reproduction and Testing                                                       | 18/05/2018 | 11:30 | Bernhard Hidding | Wenlong He             | Dino Jaroszynski | JA7.16 |

TBA

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| Catto | Jamie | Bose Einstein Condensate (BEC) Simulations |  |  | Gordon Robb | Michael Strain | Gian-Luca Oppo | JA7.01 |
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