

**Monday 23/5/16**

| Time |                     |           |                                                                                              | Primary Marker    | Independent Marker | Chair            |
|------|---------------------|-----------|----------------------------------------------------------------------------------------------|-------------------|--------------------|------------------|
| 945  | John Filshie        | 201248082 | Observing Beam Propagation by Fluorescence                                                   | Aidan Arnold      | Nigel Langford     | Erling Riis      |
| 1030 | Hao Yang            | 201209622 | Bose-Einstein condensate experiments                                                         | Aidan Arnold      | Elmar Haller       | Erling Riis      |
| 1115 | Andrew Paterson     | 201210827 | 3D-Printing of optics equipment in a laser laboratory                                        | Elmar Haller      | Griff              | Erling Riis      |
| 1200 | Ryan Higgins        | 201206991 | Programming a Gaussian-beam calculator with MATLAB                                           | Elmar Haller      | Jonathan Pritchard | Erling Riis      |
| 945  | Grant Rushford      | 201208359 | Interaction of light with Rubidium vapour                                                    | Thorsten Ackemann | Alison Yao         | Francesco Papoff |
| 1030 | Jack Martin         | 201206577 | Cold atom-light interactions                                                                 | Gordon Robb       | Griff              | Francesco Papoff |
| 1115 | Erin McAleese       | 201141272 | Cold atom-light interactions                                                                 | Gordon Robb       | Marco Piani        | Francesco Papoff |
| 1200 |                     |           |                                                                                              |                   |                    |                  |
| 1230 | Paul Graham         | 201237968 | BEC simulations                                                                              | Gordon Robb       | Aidan Arnold       | Francesco Papoff |
| 1315 | Ryan Healy          | 201219384 | Interactive Physics Simulations                                                              | Gordon Robb       | Nigel Langford     | Francesco Papoff |
| 1400 | Craig Roy           | 201237730 | Four-wave Mixing in Atomic Gases                                                             | Gordon Robb       | Michael Strain     | Francesco Papoff |
| 1200 | Ziyan Huang         | 201534166 | Design of a Brewster Window for a W-band Gyro-TWA                                            | Wenlong He        | Bengt Eliasson     | Adrian Cross     |
| 1245 | Nathan Dalgleish    | 201140292 | Design and Measurement of a Mode Converter for a Microwave Amplifier                         | Wenlong He        | Craig Donaldson    | Adrian Cross     |
| 1330 | Emma Jane Henders   | 201306181 | Monte Carlo Simulation and Cooling Performance of the MICE Step V Laboratory Experiment      | Kevin Ronald      | Alan Young         | Adrian Cross     |
| 1415 | Jonathan Lui        | 201140577 | High-Power Microwave Sources                                                                 | Phil MacInnes     | Ross Gray          | Adrian Cross     |
| 1500 | Maira Vasilevska    | 201248008 | High-Power Microwave Sources                                                                 | Phil MacInnes     | Ross Gray          | Adrian Cross     |
| 1545 | Aimee Wright        | 201238223 | Coherent and incoherent combination of laser pulses                                          | Bernhard Hidding  | Ross Gray          | Adrian Cross     |
| 1630 | Fiona Alison MacKay | 201246886 | Space Radiation Reproduction and Testing                                                     | Bernhard Hidding  | Mark Wiggins       | Adrian Cross     |
| 1030 | Joshua Robertson    | 201213582 | Photonic Neurons: Spiking information processing with lasers                                 | Antonio Hurtado   | Thorsten Ackemann  | Keith Mathieson  |
| 1115 | Simon Armstrong     | 201312954 | Characterization of Optically pumped Quantum Well and Quantum Dot Vertical-cavity Structures | Thorsten Ackemann | Antonio Hurtado    | Keith Mathieson  |
| 1200 | David Matheson      | 201219449 | Modelling Non-linear Processes in Micro-waveguides                                           | Michael Strain    | Antonio Hurtado    | Keith Mathieson  |
| 1245 | Mitchell Hodge      | 201313552 | Beam quality of broad-area lasers                                                            | Thorsten Ackemann | Michael Strain     | Keith Mathieson  |
| 1330 |                     |           |                                                                                              |                   |                    |                  |
| 1400 | Lee McCann          | 201216679 | Super-wide field of view two dimensional cell imaging                                        | Gail McConnell    | Johanna            | Keith Mathieson  |
| 1445 | Zoe Davidson        | 201216506 | Investigation into the effect of motion artefact on PPG sensor signal acquisition            | Keith Mathieson   | Gail McConnell     | Daniel Oi        |

**Tuesday 24/5/2016**

| Time |                       |           |                                                                                      | Primary Marker   | Independent Marker | Chair       |
|------|-----------------------|-----------|--------------------------------------------------------------------------------------|------------------|--------------------|-------------|
| 945  | Ruaraidh Dumbreck     | 201342349 | Noise and system response of CCD spectrographs for luminescence spectroscopy         | Paul Edwards     | Thomas Han         | KPOD        |
| 1030 | Ryan Brebner          | 201212112 | Metal foils for electron energy filtering                                            | Paul Edwards     | Yu Chen            | KPOD        |
| 1115 | Hayley Carroll        | 201211873 | Efficiency of green LEDs: How serious is the "green gap"?                            | Rob Martin       | Yu Chen            | KPOD        |
| 1200 | Samuel Robert Beattie | 201121581 | LED lighting for stimulating plant growth                                            | Rob Martin       | Jochen Bruckbauer  | KPOD        |
| 1245 |                       |           |                                                                                      |                  |                    |             |
| 1315 | Ryan Speirs           | 201237829 | Phosphorescence of glowstones                                                        | KPOD             | Paul Edwards       | Rob Martin  |
| 1400 | Connor Wasson         | 201244834 | RE-doped III-nitrides for solid state lighting applications                          | KPOD             | Paul Edwards       | Rob Martin  |
| 1445 | Patrikas Prusinskas   | 201208244 | Hysteretic Photochromic Switching (HPS) of europium-magnesium (Eu-Mg) defects in GaN | KPOD             | Paul Edwards       | Rob Martin  |
| 1530 | Peter Meadows         | 201214261 | Phosphorescence of glowstones                                                        | KPOD             | Paul Edwards       | Rob Martin  |
| 900  | Bohdan Starosta       | 201041804 | Matrix product state representation of quantum states                                | Luca Tagliacozzo | Marco Piani        | Gordon Robb |
| 945  | Luke Kavanagh         | 201237536 | Quantifying the entanglement of global quantum evolutions and measurements           | Marco Piani      | Daniel Oi          | Gordon Robb |
| 1030 | Ben Charles           | 201246917 | Quantum Measurement in the Jaynes-Cummings Model                                     | Daniel Oi        | Marco Piani        | Gordon Robb |
| 1115 | Fiona Chrystall       | 201110069 | Orbital Angular Momentum in Vectorial Kerr Cavities                                  | Alison Yao       | Gian-Luca Oppo     | Daniel Oi   |
| 1200 | Heather Simmons       | 201140535 | Non-resonant optical cavities                                                        | Nigel Langford   | Alison Yao         | Daniel Oi   |
| 1030 | Patrick Bevington     | 201113724 | Generation and propagation of spatially structured light                             | Griff            | Alison McDonald    | David McKee |
| 1115 | Jennifer Evans        | 201121599 | Characterising micro-mirror devices                                                  | Griff            | Aidan Arnold       | David McKee |
| 1200 | Michael Wright        | 201237887 | Generation and propagation of spatially structured light                             | Griff            | Elmar Haller       | David McKee |
| 1245 |                       |           |                                                                                      |                  |                    |             |
| 1315 | Rhys Ferguson         | 201209656 | Resonance in Clouds of Atoms                                                         | Francesco Papoff | Gian-Luca Oppo     | David McKee |
| 1400 | Andrew Smith          | 201238215 | Parametric difference resonance in lasers                                            | Francesco Papoff | Gian-Luca Oppo     | David McKee |
| 1445 | Sean Deighan          | 201216491 | Resonances in clouds of cold atoms                                                   | Francesco Papoff | Gian-Luca Oppo     | David McKee |
| 1530 | Nicholas Quinn        | 201239431 | Modelling scanning near-field microscopy                                             | Francesco Papoff | Brian McNeil       | David McKee |

**Thursday 26/5/2016**

| Time |                 |           |                                                                                    | Primary Marker     | Independent Marker | Chair              |
|------|-----------------|-----------|------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|
| 945  | Ashley Garton   | 201210194 | Noble Metal Quantum Dots                                                           | Yu Chen            | Ben Hourahine      | David McKee        |
| 1030 | Lee Jardine     | 201237528 | Transient Fluorescence Spectra of Proteins                                         | Olaf Rolinski      | David Birch        | David McKee        |
| 1115 | Ali Sinan Amjad | 201218998 | Revisiting Fluorescence Quantum Yield: New Light on an Old Approach                | Olaf Rolinski      | David Birch        | David McKee        |
| 1030 | Jamie Mackle    | 201210047 | Optical modes and multiple scattering                                              | Ben Hourahine      | Alison Yao         | Daniel Oi          |
| 1115 | Laurence Nix    | 201210233 | Twisted nanostructures                                                             | Ben Hourahine      | Michael Strain     | Daniel Oi          |
| 1200 | Dimitrios Bakas | 201229884 | Targeting chosen eigenvectors and singular vectors                                 | Ben Hourahine      | Nigel Badnell      | Daniel Oi          |
| 1245 |                 |           |                                                                                    |                    |                    |                    |
| 1315 | Gavin Macdonald | 201237552 | Quantum enhanced imaging                                                           | John Jeffers       | Antonio Hurtado    | Daniel Oi          |
| 1400 | Gioan Tatsi     | 201227400 | Quantum State Comparison Amplification Protocol                                    | John Jeffers       | Marco Piani        | Daniel Oi          |
| 1445 | Sukhpal Singh   | 201438815 | Hybrid Quantum Systems                                                             | Jonathan Pritchard | Nick Lockerbie     | Daniel Oi          |
| 1530 | Ilian Despard   | 201237316 | Rydberg excitations scheme for hybrid quantum technologies                         | Jonathan Pritchard | Nick Lockerbie     | Daniel Oi          |
| 945  | Allan Laird     | 201239821 | Energy upconversion in nano-crystallites for application in UHD display technology | Thomas Han         | Carol Trager-Cowan | KPOD               |
| 1030 | Ryan Mitchell   | 201246771 | An optical study of lanthanide ion doped BaY2F8 single crystals                    | Thomas Han         | Carol Trager-Cowan | KPOD               |
| 1115 | Carolyn O'Dwyer | 201246569 | Energy upconversion in nano-crystallites for application in UHD display technology | Thomas Han         | Carol Trager-Cowan | KPOD               |
| 1200 | Jan Schniete    | 201204965 | Optical spectroscopy of distant sources                                            | Carol Trager-Cowan | Nick Lockerbie     | KPOD               |
| 1245 |                 |           |                                                                                    |                    |                    |                    |
| 1315 | Crawford Wright | 201216881 | Gravity Gradiometry with Satellite Constellations                                  | Nick Lockerbie     | Jonathan Pritchard | KPOD               |
| 1330 | Lily Confield   | 201246161 | Uncovering the early stages of protein folding                                     | Neil Hunt          | Jens Sutter        | Carol Trager-Cowan |
| 1415 | Owen Brady      | 201237188 | A Physical Investigation of Protein-drug Binding                                   | Neil Hunt          | David Birch        | Carol Trager-Cowan |
| 1500 | Liam Fleming    | 201210209 | Spectroscopic Studies of Melanin Fibrils: Spectra, Kinetics, Modulators            | Jens Sutter        | David Birch        | Neil Hunt          |

**Friday 27/5/2016**

| Time |                        |           |                                                                                                 | Primary Marker | Independent Marker | Chair            |
|------|------------------------|-----------|-------------------------------------------------------------------------------------------------|----------------|--------------------|------------------|
| 945  | Craig Doris            | 201045719 | Stochastic Particle Heating of Charged Particles by Plasma Waves                                | Bengt Eliasson | Zheng-Ming Sheng   | Dino Jaroszynski |
| 1030 | Thomas Healy           | 201208870 | Stochastic Particle Heating of Charged Particles by Plasma Waves                                | Bengt Eliasson | Zheng-Ming Sheng   | Dino Jaroszynski |
| 1115 | Callum Reynolds        | 201242549 | Modelling of plasma instabilities relevant to laser-driven ion acceleration                     | Martin King    | Mark Wiggins       | Dino Jaroszynski |
| 1200 | Amy McKelvie           | 201210720 | Ion Acceleration in Relativistically Intense Laser- Solid Interactions                          | Ross Gray      | Bernhard Hidding   | Dino Jaroszynski |
|      |                        |           |                                                                                                 |                |                    |                  |
| 945  | Andrew Samuel Phillips | 201237675 | Design and simulation of a millimetre-wave source based on a pseudospark produced electron beam | Huabi Yin      | Wenlong He         | Kevin Ronald     |
|      |                        |           |                                                                                                 |                |                    |                  |
| 1300 | Stacey Leanne McDevitt | 201213697 | The scientific applications of X-ray Free Electron Lasers                                       | Brian McNeil   | Bengt Eliasson     | Gordon Robb      |
| 1345 | Michael Gates          | 201200898 | Computational Modelling of FELs                                                                 | Brian McNeil   | Bengt Eliasson     | Gordon Robb      |
| 1415 | Jenny Morgan           | 201217332 | The theory of X-ray Free electron Lasers                                                        | Brian McNeil   | Bengt Eliasson     | Gordon Robb      |
|      |                        |           |                                                                                                 |                |                    |                  |
| 945  | Anna Whyte             | 201140420 | Atomic Processes for Astrophysical Plasmas                                                      | Simon Preval   | Nigel Badnell      | Paul McKenna     |
| 1030 | Scott Whiteside        | 201237861 | Atomic Processes for Astrophysical Plasmas                                                      | Nigel Badnell  | Simon Preval       | Paul McKenna     |
| 1115 | Peter Linton           | 201248202 | Excitation of Heavy Atomic Species for ITER                                                     | Nigel Badnell  | Simon Preval       | Paul McKenna     |

**Tuesday 31/5/20176**

| Time |                   |           |                                                                                      | Primary Marker   | Independent Marker | Chair         |
|------|-------------------|-----------|--------------------------------------------------------------------------------------|------------------|--------------------|---------------|
| 945  | Malcolm Jardine   | 201322802 | Transport dynamics of quantum gases in optical potentials                            | Andrew Daley     | Luca Tagliacozzo   | John Jeffers  |
| 1030 | Samantha Hume     | 201203040 | Dynamics of impurity atom coupled to a quantum gas                                   | Andrew Daley     | Luca Tagliacozzo   | John Jeffers  |
| 1115 | Ella Wyllie       | 201237895 | Transport dynamics of quantum gases in optical potentials                            | Andrew Daley     | Luca Tagliacozzo   | John Jeffers  |
| 945  | Kieran Mitchell   | 201137744 | Predicting molecular transport properties of pollutants in marine environments       | Maxim/Kirill     | Olaf Rolinski      | Ben Hourahine |
| 1030 | Peter Strain      | 201246828 | Development of molecular-scale computer models for enhanced oil recovery             | Maxim/Kirill     | Olaf Rolinski      | Ben Hourahine |
| 1115 | James Gill        | 201237463 | Modelling of wettability of mineral surface by water and oil                         | Maxim/Kirill     | Yu Chen            | Neil Hunt     |
| 1200 | Declan Wilkinson  | 201246797 | Ionic liquids at charged interfaces: applications for electrochemical energy storage | Maxim/Kirill     | Yu Chen            | Neil Hunt     |
| 1245 | Max Holl          | 201510182 | Molecular Mechanisms of Biological Adaptation to Extreme Ionic Environments          | Maxim/Kirill     | David Palmer       | Neil Hunt     |
| 945  | Andrew Gough      | 201237950 | Medical Radio-isotope Production using a Laser-Plasma Wakefield Accelerator          | Mark Wiggins     | Zheng-Ming Sheng   | Adrian Cross  |
| 1030 | Raymond Stirling  | 201142333 | Beam-driven Plasma Wakefield Acceleration (PWFA)                                     | Bernhard Hidding | Zheng-Ming Sheng   | Adrian Cross  |
| 1115 | Andrew Sutherland | 201209583 | Mid-Infrared Laser Wakefield Acceleration                                            | Bernhard Hidding | Zheng-Ming Sheng   | Adrian Cross  |