



## PROGRAM

### DAY 1: SUNDAY 8 December

TIME	TUTORIAL SESSION 1: Optical Methods and Systems	TUTORIAL SESSION 2: Sensing and Detection
13:30- 14:00	<b>REGISTRATION</b>	
14:00 – 15:00	<b>Peter Schultz</b> <i>Peter Schultz Consulting, LLC</i> Optical Fibers for Communication: Past, Present and Future	<b>Brian Wilson</b> <i>University of Toronto</i> Optical Biophysics: Bringing Light to Life
15:00 – 16:00	<b>Ben Eggleton</b> <i>University of Sydney</i> Frontiers of guided wave nonlinear optics	<b>Tanya Monro</b> <i>University of Adelaide</i> Advanced sensing: Optical fibres beyond communications
16:00 – 17:00	<b>Howard Carmichael</b> <i>University of Auckland</i> Dissipative quantum phase transitions for photons	<b>Mike Ireland</b> <i>Australian Astronomical Observatory (AAO) and Macquarie University</i> Photonics in Astronomy: Making every photon count
17:00 - 18:00	<b>Networking Event</b>	

### DAY 2: MONDAY 9 December

TIME			
08:00	<b>REGISTRATION</b>		
09:00	<b>CONFERENCE OPENING</b>		

<b>09:15</b>	<b>PLENARY SESSION 1:</b> Sirius/Pleiades Room <b>Rainer Blatt</b> <i>Institute for Experimental Physics, University of Innsbruck</i> <i>2013 Frew Fellow of the Australian Academy of Science</i> Quantum Information Science with Trapped Ions			
<b>10:00</b>	<b>OSA President Presentation:</b> Sirius/Pleiades Room <b>Phil Bucksbaum</b> <i>Stanford University and SLAC National Accelerator Laboratory, USA and OSA President-elect 2013</i> Ultrafast AMO Physics with strong laser fields: High Harmonic Generation and X-ray Free Electron Lasers			
<b>10:30</b>	<b>MORNING TEA: Exhibition- Indian Ocean Suite</b>			
	<b>PARALLEL TECHNICAL SESSIONS</b>			
	<b>Technical Session 1</b>	<b>Technical Session 2</b>	<b>Technical Session 3</b>	<b>Technical Session 4</b>
	<b>Precision Measurements</b>  <b>Chair: Chris Vale</b>	<b>Chiral light and chiral photonics</b>  <b>Chair: Ivan Maksymov</b>	<b>Fluorescence, Upconversion and Nanoparticles</b>  <b>Chair: Georgios Tsminis</b>	<b>Transmission Technologies</b>  <b>Chair: Arthur Lowery</b>
<b>11:00</b>	<b>CONTRIBUTED PAPER: Rottneest Room</b> <b>Andre Luiten</b> <i>University Of Adelaide</i> Accurate Thermometry using Atoms	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Sergey Kruk</b> <i>Australian National University</i> Chiral Emission with Magnetic Metamaterials	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Brian Wilson</b> <i>University Of Toronto</i> Quantitative Fluorescence Imaging: Models, Prototype Instrumentation and Surgical Applications	<b>INVITED PAPER: Pleiades Room</b> <b>Leif Oxenlowe</b> <i>The Technical University of Denmark</i> Photonic Chips for Ultra-high Bit Rate Optical Signal Processing
<b>11:15</b>	<b>CONTRIBUTED PAPER: Rottneest Room</b> <b>Champak Khurmi</b> <i>Griffith University</i> Measurement of Photoionization Yield of H-atom using Intense Few Cycle Laser Pulses	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Xavier Zambrana-Puyalto</b> <i>Macquarie University</i> Inducing giant circular dichroism in non-chiral structures with the angular momentum of light	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Loretta Scolaro</b> <i>The University Of Western Australia</i> Optical Needle Probe for Dual Optical Coherence Tomography and Fluorescence Imaging	
<b>11:30</b>	<b>CONTRIBUTED PAPER: Rottneest Room</b> <b>Sheon Chua</b> <i>Australian National University</i>	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Manuel Decker</b> <i>Australian National University</i>	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Ekaterina Ivukina</b> <i>Macquarie University</i>	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Jochen Schroder</b> <i>University of Sydney</i>

	Next-Generation Squeezed Light Technology for the Enhancement of Gravitational-Wave Detectors	3D-Hybrid Nanofabrication for Near-Infrared Double-Helix Metamaterials	Modelling of Breast Lesion Detection with Upconversion Nanoparticles	Format Transparent All-Optical Hash Code Generator And Comparator
<b>11:45</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>James Anstie</b> <i>The University Of Adelaide</i> A Dual Microwave and Optical Frequency Comb Optical Spectrum Analyser	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Benjamin Cumming</b> <i>Swinburne University Of Technology</i> Direct laser written chalcogenide chiral composites with broadband circular dichroism	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Annemarie Nadort</b> <i>Macquarie University</i> Evaluation of Upconversion Nanoparticles for Biomedical Imaging	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Yizhuo Yang</b> <i>The University Of Melbourne</i> Investigation on digitized RoF for future mobile backhaul enabling simplified BS/RRH configuration
<b>12:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Roland Fleddermann</b> <i>Australian National University</i> Design and Test of the GRACE Follow-on Triple Mirror Assembly	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Kirsty Hannam</b> <i>Australian National University</i> Dispersionless Optical Activity in Coupled Chiral Meta-atoms	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Brian Wilson</b> <i>University Of Toronto</i> Surface Enhanced Raman Scattering (SERS) Nanoparticle-Based Imaging of Lung Cancer	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Benjamin Foo</b> <i>Monash University</i> Performance Comparison Of RZ And NRZ In Dispersion Unmanaged Systems
<b>12:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Richard White</b> <i>University of Adelaide</i> Stabilised Erbium Fibre Laser for Precision Measurement	<b>CONTRIBUTED PAPER: Garden Room</b> <b>David Coutts</b> <i>Macquarie University</i> Generating High Orbital Angular Momentum White-Light Vortex Beams	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Hong Kang</b> <i>Swinburne University Of Technology</i> Two-photon Fluorescence Imaging Beyond Diffraction Limit In Fibre-optic Microscopy	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Mark Pelusi</b> <i>University Of Sydney</i> Pre-Compensation of Nonlinear Fiber Distortion of Polarization Multiplexed WDM Signals by Pre-Distortion and Fiber Looped Phase Conjugation
<b>12:30</b>	<b>LUNCH: Exhibition- Indian Ocean Suite</b>			
<b>13:30</b>	<b>Development Forum: Keys to writing and submitting a paper – Rachel Won – Editor, Nature Photonics</b>			
	<b>PARALLEL TECHNICAL SESSIONS</b>			
	<b>Technical Session 1</b>	<b>Technical Session 2</b>	<b>Technical Session 3</b>	<b>Workshop - Rogue Waves</b>
	<b>Atom Optics</b>  Chair: David Kielpinski	<b>Metamaterials</b>  Chair: Snjezana Tomljenovic-Hanic	<b>Optical Coherence Tomography</b>  Chair: Brendan Kennedy	<b>Rogue waves and Extreme Events</b>  Chair: Norbert Hoffmann
<b>14:00</b>	<b>INVITED PAPER: Rottnest Room</b>	<b>INVITED PAPER: Garden Room</b>	<b>CONTRIBUTED PAPER: Sirius Room</b>	<b>OPENING REMARKS: Pleiades Room</b>

	<p><b>Dana Anderson</b>  <i>University of Colorado</i>  A Matterwave Transistor Oscillator and Other Stories of Atomtronics</p>	<p><b>Isabelle Staude</b>  <i>Australian National University</i>  Silicon Nanodisks for Magnetic-Light Nanophotonics</p>	<p><b>Xiaojie Yang</b>  <i>University of Western Australia</i>  Robust Ultrathin Needle Probe with High Sensitivity for Imaging Deep Skeletal Muscle Structure with Optical Coherence Tomography</p>	<p><b>Nail Akhmediev</b>  <b>Norbert Hoffmann</b>  <b>Helmut Brand</b></p>
14:15			<p>CONTRIBUTED PAPER: Sirius Room  <b>Graham N Smith</b>  <i>Macquarie University</i>  Femtosecond Laser Micro-inscription and Ablation of Optical Coherence Tomography and Elastography Phantoms</p>	<p>WORKSHOP PAPER: Pleiades Room  <b>Frederic Dias</b>  <i>University College Dublin</i>  Observation of rogue waves in the ocean</p>
14:30	<p>CONTRIBUTED PAPER: Rottneest Room  <b>Mojtaba Ghadimi</b>  <i>Griffith University</i>  A Micro-Fabricated Ion Trap With Integrated Diffractive Mirrors</p>	<p>CONTRIBUTED PAPER: Garden Room  <b>Ilya Shadrivov</b>  <i>Australian National University</i>  Graphene hyperbolic metamaterials</p>	<p>CONTRIBUTED PAPER: Sirius Room  <b>Peijun Gong</b>  <i>University of Western Australia</i>  Quantitative Monitoring of Human Burn Scars Using Parametric Optical Coherence Tomography</p>	<p>WORKSHOP PAPER: Pleiades Room  <b>Amin Chabchoub</b>  <i>Swinburne University</i>  Experiments on exact NLS rogue wave solutions in water waves</p>
14:45	<p>CONTRIBUTED PAPER: Rottneest Room  <b>Ben Sparkes</b>  <i>The University Of Melbourne</i>  Ultracold Ion Source with Rydberg Blockade</p>	<p>CONTRIBUTED PAPER: Garden Room  <b>Alessandro Tuniz</b>  <i>University of Sydney</i>  Subdiffraction Imaging in Metamaterial Fibres</p>	<p>CONTRIBUTED PAPER: Sirius Room  <b>Lixin Chin</b>  <i>The University Of Western Australia</i>  A Computational Model of the Mechanical Deformation and Optical Image Formation in Optical Coherence Elastography</p>	<p>WORKSHOP PAPER: Pleiades Room  <b>Neil Broderick</b>  <i>University of Auckland</i>  Are Noise-Like Pulses Optical Rogue Waves?</p>
15:00	<p>CONTRIBUTED PAPER: Rottneest Room  <b>Simon Haine</b>  <i>University Of Queensland</i>  Squeezing the most out of your Atom-Interferometer: Information Recycling Beam-Splitters for Enhanced Quantum Sensing</p>	<p>CONTRIBUTED PAPER: Garden Room  <b>Mingkai Liu</b>  <i>Australian National University</i>  Self-oscillation in Torsional Metamaterials</p>	<p>CONTRIBUTED PAPER: Sirius Room  <b>Andrea Curatolo</b>  <i>The University Of Western Australia</i>  Improving OCT Image Quality in Turbid Structured Phantoms by Beam Shaping</p>	<p>WORKSHOP PAPER: Pleiades Room  <b>Mustapha Tlidi</b>  <i>Universite Libre de Bruxelles</i>  Delayed feedback control of self-mobile localised structures: the role of the phase and carrier lifetime</p>

15:15	<p><b>CONTRIBUTED PAPER: Rottnest Room</b>  <b>Rory Speirs</b>  <i>The University Of Melbourne</i>  Electron Diffraction from a Cold Atom Electron Source</p>	<p><b>CONTRIBUTED PAPER: Garden Room</b>  <b>Withawat Withayachumnankul</b>  <i>The University Of Adelaide</i>  Terahertz Plasmonic Resonators from Coaxial Cavities</p>	<p><b>CONTRIBUTED PAPER: Sirius Room</b>  <b>Peter Munro</b>  <i>University Of Western Australia</i>  A Computational Model Of Partially Coherent Imaging Systems Employing An Electromagnetic Description Of Light</p>	<p><b>WORKSHOP PAPER: Pleiades Room</b></p>
15:30	<p><b>AFTERNOON TEA: Exhibition- Indian Ocean Suite</b></p>			
	<p><b>PARALLEL TECHNICAL SESSIONS</b></p>			
	<p><b>Technical Session 1</b></p>	<p><b>Technical Session 2</b></p>	<p><b>Technical Session 3</b></p>	<p><b>Technical Session 4</b></p>
	<p><b>Ultrafast and strong-field phenomena</b>  <b>Chair: Alex Clark</b></p>	<p><b>Novel emission phenomena:</b>  <b>Chair: Baohua Jia</b></p>	<p><b>Fibre grating sensors</b>  <b>Chair: Stephen Collins</b></p>	<p><b>Laser Development</b>  <b>Chair: John Harvey</b></p>
16:00	<p><b>CONTRIBUTED PAPER: Rottnest Room</b>  <b>Jonathan Tollerud</b>  <i>Swinburne University Of Technology</i>  Probing single quantum pathways in coherently coupled quantum wells with two colour coherent multidimensional spectroscopy</p>	<p><b>CONTRIBUTED PAPER: Garden Room</b>  <b>Lixin Zhang</b>  <i>Macquarie Uni</i>  Biophotonics and Nanophotonics Powered by Upconversion SuperDots</p>	<p><b>INVITED PAPER: Sirius Room</b>  <b>Jas Sanghera</b>  <i>Naval Research Laboratory, USA</i>  Optical Materials, Devices and Applications</p>	<p><b>CONTRIBUTED PAPER: Pleiades Room</b>  <b>Quentin Mocaer</b>  <i>Amplitude Systemes</i>  Femtosecond Fiber Chirped- And Divided-Pulse Amplification</p>
16:15	<p><b>CONTRIBUTED PAPER: Rottnest Room</b>  <b>Igor Litvinyuk</b>  <i>Griffith University</i>  Observing the Elusive Double-Peak Structure in R-dependent Tunneling Ionization Rate of Hydrogen Molecular Ion</p>	<p><b>CONTRIBUTED PAPER: Garden Room</b>  <b>John Canning</b>  <i>The University Of Sydney</i>  Fluorescence imaging as a speedy diagnostic tool for analysing self-assembled porous films</p>		<p><b>CONTRIBUTED PAPER: Pleiades Room</b>  <b>Aaron McKay</b>  <i>Macquarie University</i>  Fibre Laser Pumped Continuous-wave External cavity Diamond Raman Laser</p>
16:30	<p><b>CONTRIBUTED PAPER: Rottnest Room</b>  <b>Naylyn Gaffney</b>  <i>Swinburne University Of Technology</i>  High-order Harmonic Generation in a</p>	<p><b>CONTRIBUTED PAPER: Garden Room</b>  <b>Dragomir Neshev</b>  <i>Australian National University</i>  Spatial control of broadband emission</p>	<p><b>CONTRIBUTED PAPER: Sirius Room</b>  <b>John Arkwright</b>  <i>CSIRO</i>  A fibre optic catheter for</p>	<p><b>CONTRIBUTED PAPER: Pleiades Room</b>  <b>Darren Hudson</b>  <i>University Of Sydney</i>  A Single Frequency Mid-Infrared</p>

	Multi-jet Array	enhancement by selective bottom-up silver nanoparticle deposition	measurement of pressure and transit in the gastrointestinal tract	Fiber Laser
16:45	<p>CONTRIBUTED PAPER: Rottnest Room</p> <p><b>James Calvert</b> Griffith University The Interaction of Metastable Neon with Few Cycle Laser Pulses</p>	<p>CONTRIBUTED PAPER: Garden Room</p> <p><b>Jeffrey McCallum</b> University Of Melbourne Optical Switching and Photoluminescence in Erbium-Implanted Vanadium Dioxide Thin Films</p>	<p>CONTRIBUTED PAPER: Sirius Room</p> <p><b>Steven Hinckley</b> Edith Cowan University The Effect of High Dose Gamma Radiation on Single Mode Fibre Bragg Grating Sensors</p>	<p>CONTRIBUTED PAPER: Pleiades Room</p> <p><b>Barbara Wellmann</b> Macquarie University Tunable Deep-UV Laser Based on Ce:LiCAF</p>
17:00	<p>CONTRIBUTED PAPER: Rottnest Room</p> <p><b>Chris Hall</b> Swinburne University Of Technology Resolving Structure In Light Harvesting Complexes With Polarised 3D Coherent Multidimensional Spectroscopy</p>	<p>CONTRIBUTED PAPER: Garden Room</p> <p><b>Jelle Storteboom</b> Swinburne University Of Technology Wavelength Dependent Lifetime Investigation of Nitrogen Vacancy Centres in Nanodiamonds</p>	<p>CONTRIBUTED PAPER: Sirius Room</p> <p><b>Fotios Sidiroglou</b> Victoria University Monitoring of Ammonia Vapors Using Chitosan Thin-Films on Etched Fiber Bragg Gratings</p>	<p>CONTRIBUTED PAPER: Pleiades Room</p> <p><b>Feng Xiao</b> Edith Cowan University A reconfigurable multi wave length fibre laser source for next generation of optical networks</p>
17:15	<p>CONTRIBUTED PAPER: Rottnest Room</p> <p><b>Xiaohong Han</b> Griffith University Experiments Toward Time-domain Measurement of Attosecond XUV Pulses</p>	<p>CONTRIBUTED PAPER: Garden Room</p> <p><b>Evgeny Bogomolny</b> The University Of Auckland Microbiological safety monitoring using an all-fibre spectroscopic fluorescence system</p>	<p>CONTRIBUTED PAPER: Sirius Room</p> <p><b>Steven Hinckley</b> Edith Cowan University Intensimetric Multiplexing of Temperature and Pressure Fibre Bragg Grating Sensors</p>	<p>CONTRIBUTED PAPER: Pleiades Room</p> <p><b>David Lancaster</b> University Of Adelaide A miniature chip-scale mid-infrared glass laser</p>
17:30	<p>CONTRIBUTED PAPER: Rottnest Room</p> <p><b>Gethin Richards</b> Swinburne University Two-Colour Spectroscopy to Reveal Coherences in the Photosynthetic Light Harvesting of Cryptophytes</p>	<p>CONTRIBUTED PAPER: Garden Room</p>	<p>CONTRIBUTED PAPER: Sirius Room</p> <p><b>Dmitrii Stepanov</b> DSTO, Edinburgh Grating Writing with 1000 nm of Wavelength Control</p>	<p>CONTRIBUTED PAPER: Pleiades Room</p>
17:30	<b>POSTER SUNDOWNER: Orion Room</b>			
19:00	<b>WELCOME RECEPTION- Little Creatures Fremantle</b>			

## Poster Presentations for Optical Materials and Devices Theme

First Name	Last Name	Organisation	Speaker Abstract Title
Md	Asaduzzaman	<i>The University of Melbourne</i>	High Efficient Multi-layered Silicon Mirror Based Grating Coupler with High SNR
Benjamin	Cumming	<i>Swinburne University of Technology</i>	Study of localised cumulative heating in chalcogenide glass thin films
Judith	Dawes	<i>Macquarie University</i>	Excitation of Surface Plasmon Polaritons by Half-circular Gratings
Baofu	Ding	<i>ESRI ECU</i>	Room-Temperature Spin-Polarized Organic Light-Emitting Diodes
Stuart	Earl	<i>The University of Melbourne</i>	Nano Antenna Families for Optics Applications
Simon	Fleming	<i>University of Sydney</i>	Femtosecond Laser Written Optical Waveguides in Boroaluminosilicate Glass With Thermal Poling Induced Nonlinearity
Simon	Fleming	<i>University of Sydney</i>	Neural Interfacing Devices Fabricated by Fibre Drawing
Simon	Fleming	<i>University of Sydney</i>	Novel Approach for Reducing Reabsorption in Luminescent Solar Concentrators
Xin	Gai	<i>Australian National University</i>	The Progress of Mid-IR Supercontinuum Generation in Chalcogenide glasses
Joanne	Harrison	<i>DSTO</i>	External feedback in distributed-feedback fibre lasers
Tomonori	Hu	<i>CUDOS</i>	3- $\mu$ m class ring cavity fibre laser
Darren	Hudson	<i>University of Sydney</i>	A Single Frequency Mid-Infrared Fiber Laser
Mahmood Irtiza	Hussain	<i>Griffith University</i>	Graphene Saturable Absorber Mirror For Fiber Laser Mode-locking at 15.9nm Bandwidth
Nikolas	Iwanus	<i>School Of Physics</i>	Dual Wavelength Pumped Holmium Fibre Laser
Park	JaeSik	<i>Chonnam National University</i>	Microfluid Manipulation in Capillary Tube by Acoustic Wave
Park	JaeSik	<i>Chonnam National University</i>	Design and Experimental Evaluation of Solar Lighting Fiber
Abdul	Khaleque	<i>University of New South Wales</i>	Controlling the properties of photonic nanojets by using the magneto-optical effect
Md Rezwanul Haque	Khandokar	<i>The University of Melbourne</i>	Tailoring Dispersion by Exploiting Geometry of Silicon Waveguides
Md Rezwanul Haque	Khandokar	<i>The University of Melbourne</i>	Performance Bounds of Silicon Waveguides in Engineering Dispersion
Liming	Liu	<i>University of NSW</i>	Liquid crystal tunable terahertz metamaterials
Aaron	McKay	<i>MQ Photonics Research Centre</i>	Strong Astigmatic Lensing in High-Power (>7 W) Tungstate External-Cavity Raman Lasers
Aaron	McKay	<i>MQ Photonics Research Centre</i>	Quasi-CW-pumping of diamond Raman lasers
Evgeny	Mironov	<i>University of New South Wales</i>	Titanium absorption layer in fishnet metamaterials.
Ali	Mirzaei	<i>Australian National University</i>	Nonlinear Scattering in Plasmonic Structures
Michelle	Murtagh	<i>Macquarie University</i>	Synchronously Pumped Femtosecond Diamond Raman Laser
Gang-Ding	Peng	<i>University of New South Wales</i>	Bi/Er/Yb Co-Doped Fibre With Very Broad 1030-1560nm Emission Under 830nm Pump
Snjezana	Soltic	<i>Manukau Institute of Technology</i>	Laser-based White-light Illuminants
Xinjie	Song	<i>University of Auckland</i>	1550nm Single-mode APC Waveguides Fabricated by Laser Cutting

Sahar	Tabrizi	<i>Swinburne University</i>	Periodic Nanostructure Fabrication in Amorphous Silicon using Direct Laser Printing
Peter	Veitch	<i>University of Adelaide</i>	Compact Q-switched Er:YAG lasers at 1.64 um
Kunlun	Yan	<i>Australian National University</i>	Emission properties of Er-doped As <sub>2</sub> S <sub>3</sub> waveguides
Yinan	Zhang	<i>Swinburne University Of Technology</i>	Large Absorption Enhancement in Thin Si Wafer Solar Cells by Metallic Nanoparticle Light Trapping

## Poster Presentations for Optical Communications and Photonic Systems Theme

First Name	Last Name	Organisation	Speaker Abstract Title
Adam	Bennet	<i>Griffith University</i>	Experimentally characterising nonlocal correlations in entanglement swapping
Joel	Carpenter	<i>University of Sydney</i>	Measurement and Inversion of the Transfer Matrix of a Multimode Fibre
Thomas	Chae	<i>Melbourne University</i>	Circular Bragg Grating for Reduced Lateral and Vertical Diffraction in Silicon    Waveguides
Bradley	Clare	<i>Defence Science and Technology Organisation (DSTO)</i>	Development of a Long Range Scintillometer using the Angle-of-Arrival Technique
Sean	Manning	<i>Defence Science and Technology Organisation (DSTO)</i>	GPU-Accelerated Atmospheric Propagation Simulations
Jason	McLaren	<i>University of South Australia</i>	Experimental Investigation of Light Propagation through Simulated Turbulence:    Comparison of Narrow and Broadband Signals
Gang-Ding	Peng	<i>University of New South Wales</i>	1350 - 1470 nm Optical Amplification With Bismuth / Erbium Co-Doped Fibre
Nicolas	Riesen	<i>The Australian National University</i>	Holey Fibre Mode-Selective Couplers
Wan Zakiah	Wan Ismail	<i>Macquarie University</i>	Comparison of random lasing threshold for dielectrics and metal nanoparticles

## DAY 3: TUESDAY 10 December

TIME			
08:00	<b>REGISTRATION</b>		
09:00	<b>PLENARY 2:</b> Sirius/Pleiades Room <b>Miles Padgett</b> <i>School of Physics and Astronomy, University of Glasgow</i> Light in a Twist: Optical Angular Momentum		



<b>09:45</b>	<b>Townhall Meeting (International Year of Light):</b> Sirius/Pleiades Room Panel Chair: Ken Baldwin <i>Australian National University</i>			
<b>10:30</b>	<b>MORNING TEA: Exhibition- Indian Ocean Suite</b>			
	<b>On-chip Quantum and Nonlinear Optics</b> Chair: Matt Sellars	<b>Plasmonics</b> Chair: Ann Roberts	<b>Distributed, range and position sensing</b> Chair: Gang-Ding Peng	<b>Device Technologies</b> Chair: Min Gu
<b>11:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Irina Kabakova</b> <i>University of Sydney</i> Spectral purifier using chalcogenide chip	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Shouyi Xie</b> <i>Swinburne University Of Technology</i> Enhanced light trapping of the indium tin oxide films by ultrathin gold nano-membranes	<b>INVITED PAPER: Sirius Room</b> <b>Richard Blaikie</b> <i>University of Otago</i> Optical near-fields Engineered for Super-resolution Lithography	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>John Love</b> <i>Australian National University</i> Wavelength-Independent Mode-Selective Couplers for Few-Mode Fibre Networks
<b>11:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>James Titchener</b> <i>Australian National University</i> On-chip generation of photon pairs with tailored spatial entanglement	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Alexander Poddubny</b> <i>National Research University ITMO</i> Topological Majorana edge states in zigzag chains of plasmonic nanoparticles		<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Izabela Spaleniak</b> <i>Macquarie University</i> On-chip, narrowband spectral filtering of multimode devices
<b>11:30</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Chunle Xiong</b> <i>University Of Sydney</i> Degenerate Correlated Photon Pair Generation in an Ultra-compact Silicon Chip	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Wensheng Yan</b> <i>Swinburne University Of Technology</i> High light-confining ability of micrometre-sized parabolic mirror arrays fabricated by direct laser writing	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Lyle Roberts</b> <i>Australian National University</i> Optical phased arrays for space debris tracking, ranging and manoeuvring	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Shijie Song</b> <i>University Of Sydney</i> Highly Selective Optical Bandpass Filter based on Double-column Serial Microring Array
<b>11:45</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Raj Patel</b> <i>Griffith University</i> Operation of an On-Chip Controlled-NOT Gate using Single Photons From A Quantum Dot	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Jasper Cadusch</b> <i>The University Of Melbourne</i> Polarization Sensitive Plasmonic Cross Apertures	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Trung Duc Vo</b> <i>Defence Science And Technology Organisation</i> High resolution As <sub>2</sub> S <sub>3</sub> fibre-based distributed temperature sensor	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Andrey Sukhorukov</b> <i>Australian National University</i> Simulation of Two-Mode Squeezing in Optical Waveguide Arrays
<b>12:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Alexander Solntsev</b>	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Andrey Miroshnichenko</b>	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Nicolas Riesen</b>	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Zachary Chaboyer</b>

	<i>Australian National University</i> Active Biphoton Quantum Walks at the Edge of Quadratic Waveguide Arrays	<i>The Australian National University</i> Nanoplasmonic split-ball resonators	<i>The Australian National University</i> Digitally Range-Gated Optical Frequency Domain Reflectometry	<i>Macquarie University</i> Tunable, Monolithic, Three-path Interferometer Using Three-dimensional Laser Fabrication
<b>12:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Chunle Xiong</b> <i>University Of Sydney</i> Bi-directional Multiplexing of Heralded Single Photons from a Silicon Photonic Chip	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Qiming Zhang</b> <i>Swinburne University Of Technology</i> Enhancement of the propagation length of graphene surface plasmons on silicon waveguides at the tele-communication frequencies	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Annemarie Nadort</b> <i>Macquarie University</i> Quantitative Laser Speckle Flowmetry: In Vivo Calibration Using Sidestream Dark Field Microscopy	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Xi Chen</b> <i>The University Of Melbourne</i> Channel Dynamics of Few-mode Fiber Transmission
<b>12:30</b>	<b>LUNCH: Exhibition- Indian Ocean Suite</b>			
<b>13:30</b>	<b>Development Forum: Path to Commercialisation – Francois Ladouceur - University of New South Wales and Founder , Zedelef Pty Ltd</b>			
	<b>Technical Session 1</b>	<b>Technical Session 2</b>	<b>Technical Session 3</b>	<b>Workshop - Rogue Waves</b>
	<b>Degenerate Gases</b>  <b>Chair: Erik Streed</b>	<b>Optical Antennas</b>  <b>Chair: Ilya Shadrivov</b>	<b>Chemical and material sensing –</b>  <b>Chair: Fotios Sidiroglou</b>	<b>Rogue waves and extreme events</b>  <b>Chair: Helmut Brand</b>
<b>14:00</b>	<b>INVITED PAPER: Rottnest Room</b> <b>Andrew Truscott</b> <i>Australian National University</i> Matter Wave Coherence	<b>INVITED PAPER: Garden Room</b> <b>Ann Roberts</b> <i>University of Melbourne</i> Optical antennas: Dynamic control with tunable substrates and tailored beam excitation	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Jessica Kvensakul</b> <i>University Of Melbourne</i> In-situ Dynamic Speckle Analysis in Cultural Materials Conservation	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Norbert Hoffmann</b> <i>Hamburg University of Technology and Imperial College, London</i> Wave tank experiments and HOSM simulations on breather solutions of the nonlinear Schrodinger equation
<b>14:15</b>			<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Jiahao Dong</b> <i>Australian National University</i> Cavity Enhanced Amplitude Modulated Laser Absorption Spectroscopy for Isotopic Ratio Sensing	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Shamil Galiev</b> <i>University of Auckland</i> Transresonant catastrophic amplification of ocean waves
<b>14:30</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Brenton Hall</b>	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Ivan Maksymov</b>	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Georgios Tsiminis</b>	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Shihua Chen</b>

	<i>Swinburne University Of Technology</i> Observation of rf induced Feshbach Resonances	<i>University Of Western Australia</i> Broadband light coupling to dielectric slot waveguides with tapered plasmonic nanoantennas	<i>University Of Adelaide</i> Measuring Nitroaromatic Explosives Using Polymer-Coated Microstructured Optical Fibers	<i>Southeast University, Nanjing</i> Dark rogue waves in media with long wave – short wave resonance
<b>14:45</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Chris Vale</b> <i>Swinburne University Of Technology</i> Emergence of the Bose mode in a unitary Fermi gas	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Ben Hopkins</b> <i>Australian National University</i> The Physics of Fano Resonances in Nanoscale Oligomers	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Brian Orr</b> <i>Macquarie University</i> Trace sensing of ammonia in air by fiber-coupled continuous-wave cavity-ringdown spectroscopy	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Antoine Runge</b> <i>University of Auckland</i> Raman rogue waves in long cavity fibre laser
<b>15:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Peter Hannaford</b> <i>Swinburne University of Technology</i> Bose-Einstein Condensation in a Magnetic Lattice	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Stuart Earl</b> <i>The University Of Melbourne</i> Fabrication and Thermoplasmonic Simulation of Tunable Optical Antennas	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Judith Dawes</b> <i>Macquarie University</i> Tuning the properties of upconversion nanoparticles - luminescence and lifetime	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Majid Taki</b> <i>Universite de Lille 1</i> Secondary instabilities and dissipative rogue waves in fibre cavities
<b>15:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b>	<b>CONTRIBUTED PAPER: Garden Room</b>	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Erik Schartner</b> <i>University Of Adelaide</i> Detection of NaYF <sub>4</sub> : Tm/Yb Nanoparticles Using Suspended Core Microstructured Optical Fibres	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Wonkeun Chang</b> <i>Australian National University</i> Exploding solitons and rogue waves
<b>15:30</b>	<b>AFTERNOON TEA: Exhibition- Indian Ocean Suite</b>			
	<b>Post-deadline Papers</b>  <b>Chair: Cather Simpson</b>	<b>Novel Platforms</b>  <b>Chair: Haroldo Hattori</b>	<b>Imaging 1: Elastography</b>  <b>Chair: Stephen Hinckley</b>	<b>Rogue waves &amp; extreme events</b>  <b>Chair: Frederic Dias</b>
<b>16:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b>  Post-deadline 1	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Jeffrey McCallum</b> <i>University Of Melbourne</i> A Hybrid Optical-Electrical Pathway to	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Kelsey Kennedy</b> <i>The University Of Western Australia</i> High-resolution Stress Sensor for	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Jingsong He</b> <i>Ningbo University, Zhejiang</i> Non-symmetrical optical rogue

		Quantum Computing in Silicon	Quantitative Optical Coherence Elastography	waves
<b>16:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b>  Post-deadline 2	<b>CONTRIBUTED PAPER: Garden Room</b> <b>John Canning</b> <i>The University Of Sydney</i> The Detection of Dopant Adsorption onto Silica Nanoparticles through Photon Correlation Spectroscopy	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Rodney Kirk</b> <i>The University Of Western Australia</i> GPU-Accelerated Video-Rate Optical Coherence Elastography	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Ildar Gabitov</b> <i>University of Arizona</i> Modulation instability in optical metamaterials
<b>16:30</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b>  Post-deadline 3	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Boyuan Cai</b> <i>Swinburne University Of Technology</i> Light Trapping In Ultrathin Amorphous Silicon Solar Cells With Heterostructured Lumpy Nanoparticle Conformal Structure	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Brendan Kennedy</b> <i>The University Of Western Australia</i> Optical Elastography for High Resolution Imaging of Tissue Mechanical Properties	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Krassimir Panayotov</b> <i>Universite Libre de Bruxelles</i> Two-mode dynamics of vertical-cavity surface-emitting lasers
<b>16:45</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b>  Post-deadline 4	<b>CONTRIBUTED PAPER: Garden Room</b> <b>John Canning</b> <i>The University Of Sydney</i> The nanostructure of self-assembled silica microwires: a crystalline pure silica zeolite?	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Shaghayegh Eshaghian</b> <i>The University Of Western Australia</i> <i>In Vivo</i> Micro-palpatation Imaging of Human Skin	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Natasha Devine</b> <i>Australian National University</i> Rogue waves and their early detection
<b>17:00</b>	<b>POSTER SUNDOWNER: Orion Room</b>			
<b>19:00</b>	<b>CONFERENCE DINNER- Frasers Restaurant, Kings Park</b>			

## Poster Presentations for Atom, Quantum and Nonlinear Optics, And Optical Spectroscopy Theme

First Name	Last Name	Organisation	Speaker Abstract Title
Diana	Antonosyan	<i>Australian National University</i>	Single-Photon Down-Conversion in Nonlinear Waveguide Arrays
Mark	Baker	<i>University of Queensland</i>	Engineering synthetic rotations with ultracold atoms
Matthew	Collins	<i>University of Sydney</i>	Photon-counting Raman Spectroscopy of Chip-scale Photonic Devices
Judith	Dawes	<i>Macquarie University</i>	Incoherent cathodoluminescence in plasmonic gold nanostructures
Kristian	Fenech	<i>Swinburne University of Technology</i>	Towards Large Two-Dimensional Fermi Gases
Xavier	Fernandez Gonzalvo	<i>University of Otago</i>	Exploring the Hyperfine Structure of Er:YSO via Spectral Hole Burning
Song-Hee	Han	<i>Mokpo National Maritime University</i>	Laser-Induced Breakdown Spectroscopy of Heavy Metal Ions in Water: Improving Limits of Detection
Esa	Jaatinen	<i>Queensland University of Technology</i>	Phase Conjugate Enhancement of Doughnut Mode Beam Intensity
Esa	Jaatinen	<i>Queensland University of Technology</i>	Quantum Model of Second Harmonic Generation in Gold Nanoparticles
Iman	Jizan	<i>University of Sydney</i>	High Resolution Joint Spectral Intensity Measurements of Photon Pairs
Kenny	Li	<i>Griffith University</i>	The pointer basis and the feedback stabilization of quantum systems
Nicholas	McKay-Parry	<i>University of Queensland</i>	Dual-Component Condensates for Quantum Emulation of Percolation
Russell	McLean	<i>Swinburne University of Technology</i>	Directionality of Frequency-Converted Infrared and Blue Radiation Generated by Parametric Wave Mixing
Lasse	Mejling Andersen	<i>Technical University of Denmark</i>	Optimization of Quantum-state-preserving Frequency Conversion by Changing the Input Signal
Iurii	Mordovin	<i>Swinburne University of Technology</i>	Precision measurement of the highest bound state energy in $87\text{Rb}$
Silvie	Ngo	<i>Australian National University</i>	Using a Fibre Michelson Interferometer as a Laser Frequency Reference
Joshua	Torrance	<i>The University of Melbourne</i>	Laser Locking and Linewidth Reduction Techniques
Yibo	Wang	<i>Swinburne University of Technology</i>	Sub-Micron Period 2D Magnetic Lattices for Ultracold Atoms
Han	Xu	<i>Griffith University</i>	Carrier-Envelope Phase effect for Dissociation of Molecular Hydrogen
Zhizhong	Yan	<i>Macquarie University</i>	Femtosecond Laser-Written Fused Silica Waveguides for Quantum Optics
Amna	Zahid	<i>Griffith University</i>	Optimization of Attosecond XUV Pulses

## Poster Presentations for Optical Sensors and Imaging, Including Microscopy Theme

First Name	Last Name	Organisation	Speaker Abstract Title
John	Canning	<i>The University of Sydney</i>	Broadband, Chirped Regenerated Fibre Bragg Gratings for Ultrahigh Temperature Operation
John	Canning	<i>The University of Sydney</i>	Regenerated Fibre Bragg Grating Array By High-Temperature Strain-tuning
Stephen	Collins	<i>Victoria University</i>	Zeolite-based Optical Fibre Sensor for Selective Sensing of Alcohols in Water
Vincent	Daria	<i>The Australian National University</i>	Femtosecond-laser Surgery for Analysing Morphology-dependent Neuronal Function
Philip	Dolan	<i>CMP, Swinburne University Of Technology</i>	Imaging Nitrogen Vacancy Centres With Cylindrically Polarised Beams For Orientation Determination of Magnetic Dipoles
Benoit	Gouhier	<i>The University of Melbourne</i>	Measurement of radiated E-field using an electro-optic probing scheme with a balanced heterodyne architecture
Steven	Hinckley	<i>Edith Cowan University</i>	Characterising the resolvability of OCT light sources using an interferometry model
Steven	Hinckley	<i>Edith Cowan University</i>	The Effects of Lateral and Longitudinal Loading on a Fibre Bragg Grating Pressure Sensor
Laiq	Hussain	<i>Nanometer Structure Consortium (NmC@LU), Lund University</i>	Structural and Optical Characterization of MBE And MOVPE Grown InSb QDs on InAs Substrate
Hong	Kang	<i>Swinburne University of Technology</i>	Configuring light-induced magnetization by tightly focusing cylindrically polarized beams
Hong	Kang	<i>Swinburne University of Technology</i>	Three-dimensional Parallel Recording With a Diffraction-limited Multifocal Array
Blake	Klyen	<i>University of Western Australia</i>	Diseased Muscle Can Be Assessed By Near-Infrared Imaging of the Tissue Optical Extinction
Jevon	Longdell	<i>University Of Otago</i>	Using Quantum Memories for Ultrasound-modulated Optical Tomography
Pan	Ma	<i>Australian National University</i>	Low-loss chalcogenide waveguides for chemical sensing in the mid-infrared
Linh	Nguyen	<i>The University of Adelaide</i>	Toluene vapour sensing using $\beta$ -Cyclodextrin immobilized within a suspended core optical fibre
Taras	Plakhotnik	<i>The University Of Queensland</i>	Nitrogen-vacancy Centres in Diamond: A Closer Look at Physics and Their Nanosensing Potential
Erik	Streed	<i>Griffith University</i>	Limits to imaging trapped ions
Peter	Veitch	<i>University of Adelaide</i>	Single shot, high sensitivity laser beam profiling using Hartmann wavefront sensors

## DAY 4: WEDNESDAY 11 December

TIME				
<b>08:00</b>	<b>REGISTRATION</b>			
<b>09:00</b>	<b>PLENARY SESSION 4:</b> Sirius/Pleiades Room <b>Bruce Tromberg</b> <i>Beckman Laser Institute and Medical Clinic, University of California, Irvine, USA</i> Engineering Optics From Benchtop to Bedside			
<b>09:45</b>	<b>SPIE PRESIDENT PRESENTATION:</b> Sirius/Pleiades Room <b>Phil Stahl</b> <i>Senior Optical Physicist at NASA MSFC and SPIE President-elect 2013</i> James Webb Space Telescope – the First Light Machine			
<b>10:15</b>	<b>AOS W. H. (Beattie) Steel Medalist-Ceremony:</b> Sirius/Pleiades Room <b>John Harvey</b> <i>University of Auckland</i>  Ceremony 5 mins Presentation 25 mins			
<b>10:45</b>	<b>MORNING TEA: Exhibition- Indian Ocean Suite</b>			
	<b>Quantum Information Theory</b>  <b>Chair: Howard Carmichael</b>	<b>Nanophotonics</b>  <b>Chair: Ben Eggleton</b>	<b>RF/Microwave Technologies</b>  <b>Chair: Yizhuo Yang</b>	<b>Rogue waves and Extreme Events</b>  <b>Chair: Neil Broderick</b>
<b>11:15</b>	<b>CONTRIBUTED PAPER:</b> Rottnest Room <b>Shakib Daryanoosh</b> <i>Griffith Univesity</i> Quantum Jumps Are More Quantum Than Quantum Diffusion	<b>INVITED PAPER: Garden Room</b> <b>Christopher Poulton</b> <i>University Of Technology, Sydney</i> Stimulated Brillouin Scattering and acoustic mode confinement in integrated photonic circuits	<b>CONTRIBUTED PAPER:</b> Sirius Room <b>Blair Morrison</b> <i>University of Sydney</i> High Resolution On-chip RF Photonic Notch Filter with Enhanced Energy Efficiency	<b>WORKSHOP PAPER:</b> Rottnest Room <b>Stefan Mueller</b> <i>University of Magdeburg</i> Large amplitude waves in an active medium
<b>11:30</b>	<b>CONTRIBUTED PAPER:</b> Rottnest Room <b>Tod Wright</b> <i>University Of Queensland</i>		<b>CONTRIBUTED PAPER:</b> Sirius Room <b>Ken Baldwin</b> <i>Australian National University</i>	<b>WORKSHOP PAPER:</b> Rottnest Room <b>Helmut Brand</b> <i>Bayreuth University</i>

	Geometric Measures of Quantum Relaxation		RF laser-transfer timing for radio astronomy	Exploding dissipative solitons in two dimensions
<b>11:45</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Ivan Herrera- Benzaquen</b> <i>Swinburne University Of Technology</i> Quantum Dynamics in a Zeno Subspace	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Yaoyu Cao</b> <i>Swinburne University Of Technology</i> Breaking the diffraction limit for ultra-high density optical memory	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Sascha Schediwy</b> <i>University Of Western Australia</i> Microwave Frequency Transfer over Optical Fibre	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Adrian Ankiewicz</b> <i>Australian National University</i> Rogue waves: effect of higher-order terms
<b>12:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Ivonne Guevara</b> <i>Griffith University</i> Quantum Smoothing & Completely positive Quantum Trajectories	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Katie Chong</b> <i>Australia National University</i> Observation of Fano Resonance in Silicon Oligomers	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Liwei Li</b> <i>The University Of Sydney</i> Novel Continuously Tunable Spectrum Sliced Microwave Photonic Signal Processor	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Nail Akhmediev</b> <i>Australian National University</i> Rogue waves – higher order structures
<b>12:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Jesper Christensen</b> <i>Technical University Of Denmark</i> Nonlinear Pulse-reshaping of Sub-picosecond Pulses by Non-degenerate Four-wave Mixing	<b>CONTRIBUTED PAPER: Garden Room</b>	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Zhizhong Yan</b> <i>Macquarie University</i> High Speed BB84 Decoy State Quantum Key Distribution Source for Uplink Quantum Satellite	<b>WORKSHOP PAPER: Rottnest Room</b> <b>Shamil Galiev</b> <i>University of Auckland</i> Extreme wave / hull element interaction <hr/> <b>Rogue waves: CONCLUDING REMARKS and DISCUSSIONS</b>
<b>12:30</b>	<b>LUNCH: Exhibition- Indian Ocean Suite</b>			
<b>13:30</b>	<b>Development Forums: Building a career in photonics – John Harvey – Founder, Southern Photonics &amp; University of Auckland</b>			
	<b>Technical Session 1</b>	<b>Technical Session 2</b>	<b>Technical Session 3</b>	<b>Technical Session 4</b>
	Quantum Optics and Quantum Information Chair: Brenton Hall	Fibre and waveguide technologies Chair: John Canning	Sensing Technologies Chair: Robert McLaughlin	Novel Integrated Photonics Chair: Min Gu
<b>14:00</b>	<b>INVITED PAPER: Rottnest Room</b> <b>Andreas Jechow</b> <i>University of Potsdam</i> Enhanced two photon excited	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Stephen Warren-Smith</b> <i>The University Of Adelaide</i> Fabrication And Splicing Of Exposed	<b>INVITED: Sirius Room</b> <b>Colin Sheppard</b> <i>Italian Institute Of Technology</i> Imaging and super resolution using	<b>INVITED PAPER: Pleiades Room</b> <b>Jagadish Chennupati</b> <i>The Australian National University</i>



	fluorescence by photon bunching	Core Microstructured Optical Fibres	source and detector arrays	Compound Semiconductor Nanowires for Optoelectronic Device Applications
14:15		CONTRIBUTED PAPER: Garden Room <b>Thomas Buettner</b> <i>CUDOS, IPOS, School Of Physics, The University Of Sydney</i> Generation of Picosecond Pulses via Stimulated Brillouin Scattering and Four Wave Mixing		
14:30	CONTRIBUTED PAPER: Rottnest Room <b>Geoff Pryde</b> <i>Griffith University</i> Experimental Investigation of a Quantum Joint Measurement Uncertainty Relation	CONTRIBUTED PAPER: Garden Room <b>Iman Aryanfar</b> <i>University Of Sydney</i> Radiation Pressure and Non-reciprocal Mode-conversion in Nanophotonic Waveguides	CONTRIBUTED PAPER: Sirius Room <b>Stine Højer Møller Larsen</b> <i>Technical University Of Denmark</i> Effect of Aircladding on Bessel-Like Modes	CONTRIBUTED PAPER: Pleiades Room <b>Yanbing (Young) Zhang</b> <i>University of Sydney</i> Single-pump Phase Sensitive Amplification in Silicon Photonic Crystal Waveguides
14:45	CONTRIBUTED PAPER: Rottnest Room <b>Alex Clark</b> <i>University Of Sydney</i> Quantum Metrology with Non-Degenerate Entangled Photons	CONTRIBUTED PAPER: Garden Room <b>Kristopher Rowland</b> <i>University of Adelaide</i> Extruded Soft Glass Single-Ring Hollow Core Fibres	CONTRIBUTED PAPER: Sirius Room <b>Arie Paap</b> <i>Edith Cowan University</i> Optoelectronics-based Plant Discrimination Sensor for Precision Agriculture	CONTRIBUTED PAPER: Pleiades Room <b>Samuel Francis</b> <i>Australian National University</i> Femto Watt Level Weak Light Phase Tracking
15:00	CONTRIBUTED PAPER: Rottnest Room <b>Matthew Sellars</b> <i>Australian National University</i> Maximizing spin coherence times in rare-earth optical centres	CONTRIBUTED PAPER: Garden Room <b>Wen Qi Zhang</b> <i>University Of Adelaide</i> Lead Silicate Microstructured Optical Fibres For Electro-optical Applications	CONTRIBUTED PAPER: Sirius Room <b>Lixin Zhang</b> <i>Macquarie University</i> Multimodality Characterisation System to Study Lanthanide Doped Upconversion SuperDots	CONTRIBUTED PAPER: Pleiades Room <b>Andrea Blanco-Redondo</b> <i>University of Sydney</i> First observation of soliton compression in silicon photonic crystals
15:15	CONTRIBUTED PAPER: Rottnest Room <b>George Brawley</b> <i>The University Of Queensland</i> Quadratic Measurement and Conditional State Preparation in an Optomechanical System	CONTRIBUTED PAPER: Garden Room <b>Stephen Warren-Smith</b> <i>The University Of Adelaide</i> Exposed-Core Microstructured Optical Fibre Bragg Grating Refractometer	CONTRIBUTED PAPER: Sirius Room <b>Galiya Sharafutdinova</b> <i>University Of Newcastle</i> Investigating A New Volume Scanner	CONTRIBUTED PAPER: Pleiades Room <b>Jochen Schröder</b> <i>University Of Sydney</i> Reconfigurable Universal Transmitter for Rapid Prototyping and Flexible Signal Generation
15:00	<b>AFTERNOON TEA: Exhibition- Indian Ocean Suite</b>			

	<b>Nonlinear Fibre Optics</b> <b>Chair: Simon Haine</b>	<b>Nonlinear materials and characterisation</b> <b>Chair: Christopher Poulton</b>	<b>Wavefront propagation, imaging and correction</b> <b>Chair: Mathew Arnold</b>	<b>Quantum and Nonlinear Optics</b> <b>Chair: Andre Luiten</b>
<b>15:30</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Ilya Shadrivov</b> <i>Australian National University</i> Linear and Nonlinear Graphene Waveguide Couplers	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Baohua Jia</b> <i>Swinburne University Of Technology</i> Nonlinear photonic crystal in quantum dot films	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Colin Sheppard</b> <i>Italian Institute Of Technology</i> Optical propagation using three-dimensional spatial frequency representation	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Sergei Slussarenko</b> <i>Università Di Napoli Federico</i> Polarization Gears: Controlling the Polarization Rotation by Orbital Angular Momentum
<b>15:45</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Matthew Petrasianus</b> <i>Griffith University</i> High-power 370 nm picosecond pulse source for trapped-ion quantum logic	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Xin Gai</b> <i>Australian National University</i> The measurement of nonlinear absorption and refraction in crystalline silicon for 2.75–5.5 $\mu\text{m}$	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Dirk Lorensen</b> <i>The University Of Western Australia</i> Energy-efficient Achromatic Low-Fresnel-number Bessel-like Beams for Optical Imaging Generated Using a Spatial Light Modulator	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Soren Michael Mork Friis</b> <i>Technical University Of Denmark</i> Raman and loss induced quantum noise in a depleted phase-sensitive parametric amplifier
<b>16:00</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Wonkeun Chang</b> <i>Australian National University</i> Ionization-induced soliton blue-shift and compression in gas-filled photonic crystal fibers	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Yan Sheng</b> <i>Australian National University</i> Unified approach to nonlinear Cerenkov radiation in waveguides and bulk media	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Kasper Ingerslev</b> <i>Technical University Of Denmark</i> S2-imaging of Bessel-like Beams	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Chad Husko</b> <i>University Of Sydney</i> Nonlinear Limits to Heralded Photon Sources
<b>16:15</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Samuel Legge</b> <i>University Of Newcastle</i> Low Order Solitons in Higher Order Electromagnetic Modes of Photonic Crystal Fibre	<b>CONTRIBUTED PAPER: Garden Room</b> <b>Yue Sun</b> <i>Australian National University</i> Optomechanical Chaos with Nanobeam Cavities	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Hoang Vu Le</b> <i>Swinburne University Of Technology</i> Coherent Diffractive Imaging with Table-Top High Harmonic Generation	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Lukas Helt</b> <i>Macquarie University</i> Effect of Spectral Correlations on Optical Bell State Polarisation Fringe Visibility
<b>16:30</b>	<b>CONTRIBUTED PAPER: Rottnest Room</b> <b>Philip Light</b> <i>University Of Adelaide</i> Laser-Cooled Rubidium in Hollow	<b>CONTRIBUTED PAPER: Garden Room</b> <b>David Powell</b> <i>Australian National University</i> Third Order Nonlinearity in Chiral	<b>CONTRIBUTED PAPER: Sirius Room</b> <b>Sharmila Sane</b> <i>Australian National University</i> Optimising Light Delivery into Brain	<b>CONTRIBUTED PAPER: Pleiades Room</b> <b>Joel Carpenter</b> <i>University Of Sydney</i> Orbital Angular Momentum

	Optical Fibres	Metamaterials	Tissue by Wavefront Correction	Multiplexed Single-Photon and Classical Channels in a Few-mode Fibre
16:45	<p><b>CONTRIBUTED PAPER: Rottnest Room</b>  <b>Christopher Perrella</b>  <i>University Of Adelaide</i>  Non-Linear Spectroscopy of Gas-Filled Hollow-Core Optical Fibres</p>	<p><b>CONTRIBUTED PAPER: Garden Room</b>  <b>Xiaorui Zheng</b>  <i>Swinburne University Of Technology</i>  Ellipsometry characterisation of graphene oxide thin films through the laser-induced reduction process</p>		<p><b>CONTRIBUTED PAPER: Pleiades Room</b>  <b>Lukas Helt</b>  <i>Macquarie University</i>  Spontaneous Four-Wave Mixing Dynamics</p>
17:00	<p><b>AOS Geoff Opat (Early Career Researcher) Award-Ceremony: Sirius/Pleiades Room</b>  <b>Igor Aharonovich</b>  <i>University of Technology, Sydney</i></p> <p><i>Ceremony 5 mins</i>  <i>Presentation 25 mins</i></p>			
17:30	<p><b>CLOSING CEREMONY: Sirius/Pleiades Room</b></p>			
17:45	<p><b>Conference Close</b></p>			