



**AUSTRALIAN INSTITUTE OF PHYSICS CONGRESS**  
CO-LOCATING WITH NFO17, COMMAD 2024 & ANZCOP 2024  
**MELBOURNE AUSTRALIA 2-5 DECEMBER 2024**

## Sunday 1 December 2024

Time	Session	Room
<b>1700 - 2000</b>	Registration Open <i>Collect your name badge at the registration desk adjacent from Exhibition Hall Door 7</i>	Registration Desk
	<b>Welcome Reception</b>	
<b>1800 - 2000</b>	Kick off AIP 2024 at the Welcome Reception—an ideal chance to reconnect and network in a relaxed setting.	Exhibition Hall



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**Monday 2 December 2024**

Time	Session	Room
<b>0830 - 0900</b>	<b>Congress Opening</b>	
	Welcome to Country & Congress Opening	Plenary Room
<b>0900 - 1030</b>	<b>Plenary Session</b>	
	Jennifer Dionne	Plenary Room
	Nicolas Regnault	
<b>1030 - 1100</b>	<b>Morning Tea</b>	<b>Exhibition Hall</b>
<b>1100 - 1230</b>	<b>Concurrent Sessions</b>	
	ANZCOP - Fiber Optics and Communications I	216
	CMM - Magnetism I	209
	COMMAD - COMMAD Session I	206
	Focus Session - Quantum Biotechnology	217
	NFO - Molecular Layers: Light-Matter Interactions I	208
	NFO - Plasmonic Meta-optics I	219
	NUPP - Nuclear Physics I	218
	QST - Communications and Networks	Plenary Room
	QST - Error Correction	220
TPG - Condensed Matter Theory and Complex Systems	214	
<b>1230 - 1330</b>	<b>Lunch Break</b>	<b>Exhibition Hall</b>
<b>1245 - 1330</b>	Victorian AIP Annual General Meeting	219
<b>1330 - 1415</b>	<b>Plenary Session</b>	
	Key Mei Lau	Plenary Room
<b>1430 - 1600</b>	<b>Concurrent Sessions</b>	
	ANZCOP - Astronomy Optics and Instrumentation	216
	CMM - Magnetism II	209
	COMMAD - Semiconductor Lasers	206
	Focus Session - Quantum Biotechnology	217



**Monday 2 December 2024**

<b>Time</b>	<b>Session</b>	<b>Room</b>
<b>1430 - 1600</b>	NFO - Electron-based Near-field Probing	208
	NFO - Plasmonic Meta-optics II	219
	NUPP - B Physics	218
	QST - Advanced Devices	220
	QST - Machine Learning I	Plenary Room
	TPG - Quantum Fields and Gravity	214
<b>1600 - 1700</b>	<b>Poster Session I &amp; Afternoon Tea</b>	<b>Exhibition Hall</b>
	<b>Concurrent Sessions</b>	
<b>1700 - 1830</b>	ANZCOP - Photonic Integrated Circuits	216
	ATMOP - Dynamics	206
	CMM - Superconductivity and Magnetism	209
	Focus Session - Additive Manufacturing of Optical Glass	217
	NFO - Nano- and Micro-fabrication	208
	NFO - Plasmonic Meta-optics III	219
	NUPP - Particle Physics I	218
	QST - Metrology and Sensing	Plenary Room
	QST - Timing	220
	TPG - Condensed Matter Theory and Mathematical Physics	214



**Tuesday 3 December 2024**

Time	Session	Room
<b>0800 - 0900</b>	<b>De-GAP Breakfast session</b>	
	<i>This breakfast session has limited spaces.</i>	
<b>0900 - 1030</b>	<b>Plenary Session</b>	
	Sile Nic Chormaic Georgi Dvali	Plenary Room
<b>1130 - 1230</b>	<b>Concurrent Sessions</b>	
	ANZCOP - Laser Physics and Active Photonics I	216
	ANZCOP - Nonlinear Photonics	218
	ATMOP - Ultra Cold Atoms	206
	CMM - Microstructural Characterisation	209
	Focus Session - Precision Quantum Sensing	217
	NFO - 2D Materials I	219
	NFO - Near-field Microscopy I	208
	QST - Communication and Cryptography	Plenary Room
	QST - Control and Modelling	220
TPG - Quantum Fields	214	
<b>1230 - 1330</b>	<b>Lunch Break</b>	<b>Exhibition Hall</b>
<b>1230 - 1330</b>	Optica Student Member Lunch	To be confirmed
<b>1235 - 1325</b>	ANZOS Annual General Meeting	216
	CMM - Annual General Meeting	218
<b>1330 - 1450</b>	Gavin Reid (ARC Executive Director: MPCE) Talk and Q&A	219
	<b>Awardee Lectures</b>	
<b>1330 - 1410</b>	Walter Boas Medal Recipient	Plenary Room
<b>1410 - 1450</b>	Harrie Massey Medal Recipient	Plenary Room
<b>Concurrent Sessions</b>		



**Tuesday 3 December 2024**

<b>Time</b>	<b>Session</b>	<b>Room</b>
<b>1500 - 1600</b>	ANZCOP - Biophotonics and Optical Sensors I	216
	ANZCOP - Nanophotonics and Nanoplasmonics	217
	CMM - Transition Metal Dichalcogenides	209
	NFO - 2D Materials II	219
	NFO - Molecular Layers: Light-Matter Interactions II	208
	NUPP - Nuclear Physics II	218
	QST - Atoms and Ions	Plenary Room
	QST - Transduction	220
	STSP - Space Science I	206
	TPG - Quantum Theory and Plasma Physics	214
<b>1600 - 1630</b>	<b>Afternoon Tea</b>	<b>Exhibition Hall</b>
	<b>Concurrent Sessions</b>	
	ANZCOP - Fiber Optics and Communications II	216
	ATMOP - Atoms, Ions and Nuclei	206
	CMM - Thermo- and Magnetoelectrics	209
	Focus Session - Precision Quantum Sensing	217
<b>1630 - 1800</b>	NFO - Dielectric Meta-Optics	208
	NFO - Fundamentals II	218
	NFO - Near-field Microscopy II	219
	NUPP - Nuclear Physics III	214
	QST - Fundamental Physics	Plenary Room
	QST - Machine Learning II	220
<b>1900 - 2000</b>	<b>Public Lecture</b>	
	Christopher Ferrie	Plenary Room



**Wednesday 4 December 2024**

Time	Session	Room
<b>0800 - 0900</b>	<b>Physics Education Breakfast Session</b>	
	<i>This breakfast session has limited spaces.</i>	
<b>0900 - 1030</b>	<b>Plenary Session</b>	
	Tamara Davis	Plenary Room
	Manjula Sharma	
<b>1030 - 1100</b>	<b>Morning Tea</b>	<b>Exhibition Hall</b>
	<b>Concurrent Sessions</b>	
	ANZCOP - Quantum Optics	216
	ANZCOP - Spectroscopy and Imaging I	218
	Focus Session - Bridging High School and Tertiary Physics	214
	Focus Session - Excitons, Polaritons and Emerging Applications of Polaritons	217
<b>1000 - 1230</b>	NFO - Fundamentals I	208
	NFO - Nanophotonic Devices and Systems	219
	NUPP - Particle Physics II	206
	QST - Color Centers	220
	QST - Process Tomography	Plenary Room
	QST - Simulation I	209
<b>1230 - 1330</b>	<b>Lunch Break</b>	<b>Exhibition Hall</b>
<b>1245 - 1330</b>	ANZCOP Community support of the International day of light - can we do more?	216
	Heads of School Meeting	217
<b>1330 - 1415</b>	<b>Plenary Session</b>	
	Elisabetta Barberio	Plenary Room
	<b>Concurrent Sessions</b>	
	ANZCOP - Biophotonics and Optical Sensors II	218
	ANZCOP - Spectroscopy and Imaging II	216
<b>1430 - 1600</b>	CMM - Thin Films	208
	Focus Session - Excitons, Polaritons and Emerging Applications of Polaritons	217
	GAP - Astroparticle I	206



**Wednesday 4 December 2024**

Time	Session	Room
<b>1430 - 1600</b>	NUPP - Facilities	209
	PEG - PEG Education Across Settings	214
	QST - Boson Sampling	219
	QST - Sensing/Timing	220
	QST - Simulation II	Plenary Room
<b>NFO Excursion to Royal Botanical Gardens</b>		
<b>1500 - 1800</b>	<i>The NFO Excursion is for delegates who have selected this option during the registration process. Bus transportation from MCEC to the Royal Botanic Gardens will be provided. Details to be provided shortly</i>	Royal Botanical Gardens
<b>1600 - 1700</b>	<b>Poster Session II &amp; Afternoon Tea</b>	<b>Exhibition Hall</b>
<b>Concurrent Sessions</b>		
<b>1700 - 1800</b>	ANZCOP - Nanophotonics and Nanoplasmonics	208
	ASGRG - General Relativity and Gravitation I	209
	CMM - Topological Materials	216
	COMMAD - Nanowires	219
	NUPP - Dark Matter	218
	NUPP - Particle Physics III	217
	PEG - Effective Approaches to Teaching	214
	QST - Causality and Foundations I	Plenary Room
	QST - Materials and Devices I	220
	STSP - Space Science II	206
<b>1930 - 2230</b>	<b>Congress Dinner</b> Olympic Room, Melbourne Cricket Ground (MCG)	Offsite (MCG)



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**Thursday 5 December 2024**

Time	Session	Room
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<b>0830 - 1800</b>	SPIE Pacific Rim Security + Defence Workshop	207
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**Plenary Session**

<b>0900 - 1030</b>	David Wiltshire Ivan Deutsch	Plenary Room
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<b>1030 - 1100</b>	<b>Morning Tea</b>	<b>Exhibition Hall</b>
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**Concurrent Sessions**

ANZCOP - ANZOS Award Presentations	216
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ATMOP - Sensing	206
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CMM - Nanoparticles and Thin Films	209
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COMMAD - COMMAD Session 3	214
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<b>1100 - 1230</b>	Focus Session - Accelerator Science in Australia	218
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Focus Session - Synergies between particle and astrophysics in the hunt for dark matter	217
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NFO - Near-field Microscopy II	Plenary Room
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QST - Algorithms and Theoretical Methods I	220
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QST - Causality and Foundations II	219
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QST - Optical Quantum Information I	208
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<b>1230 - 1400</b>	<b>Lunch Break</b>	<b>Exhibition Hall</b>
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<b>1245 - 1345</b>	NFO Annual General Meeting	209
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**Concurrent Sessions**

AIP Award Talks - AIP Awards	217
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**Thursday 5 December 2024**

<b>Time</b>	<b>Session</b>	<b>Room</b>
<b>1500 - 1600</b>	ANZCOP - Novel Photonic Materials and Fabrication	216
	ASGRG - General Relativity and Gravitation II	214
	CMM - Phononics, Photoluminescence, Fermionics and Antibimerons	209
<b>1500 - 1600</b>	GAP - Astroparticle II	208
	NFO - Fundamentals III	Plenary Room
	NUPP - Theory	218
	PEG - Labs and Hands on Learning	206
	QST - Materials and Devices II	219
	QST - Optical Quantum Information II	220
<b>1600 - 1630</b>	<b>Afternoon Tea</b>	<b>Exhibition Hall</b>
	<b>Concurrent Sessions</b>	
<b>1630 - 1800</b>	ANZCOP - Laser Physics and Active Photonics II	216
	ANZCOP - Optoacoustics and Optomechanics	218
	ATMOP - From Droplets to Relativistic Quantum Mechanics	206
	CMM - Electron Band Theory	209
	COMMAD - COMMAD Session 4	214
	Focus Session - Synergies between particle and astrophysics in the hunt for dark matter	217
	NFO - Optical Nanotweezers	Plenary Room



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<b>Time</b>	<b>Session</b>	<b>Room</b>
	QST - Algorithms and Theoretical Methods II	220
	QST - Dynamics and Control	219
	QST - Sensing	208
	<b>Closing Ceremony</b>	
<b>1800 - 1830</b>	AIP 2024 co-locating with NFO-17, ANZCOP & COMMAD Official Closing Ceremony	Plenary Room



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### Friday 6 December 2024 (NFO Summer School)

Time	Session	Room
<b>0900 - 1000</b>	NFO Summer School	213
<b>1000 - 1030</b>	<b>Morning Tea</b>	<b>213 Foyer</b>
<b>1030 - 1230</b>	NFO Summer School	213
<b>1230 - 1330</b>	<b>Lunch Break</b>	<b>213 Foyer</b>
<b>1330 - 1530</b>	NFO Summer School	213
<b>1530 - 1600</b>	<b>Afternoon Tea</b>	<b>213 Foyer</b>
<b>1600 - 1700</b>	NFO Summer School	213
<b>1700 - 1715</b>	<b>NFO Summer School - Closing Remarks</b>	213