24th Australian Institute of Physics Congress

Sunday, 11 December 2022 - Friday, 16 December 2022

Scientific Programme
AIP Congress
Tracks for The Australian Institute of Physics Congress

AIP: Astronomy
AIP: Group for Astroparticle Physics
AIP: Atomic and Molecular Physics
AIP: Biomedical and Medical Physics
AIP: Computational and Mathematical Physics
AIP: Condensed Matter, Materials and Surface Physics
AIP: Education
AIP: Environmental Physics
AIP: Geophysics
AIP: Meteorology, Climate Change and Oceanography
AIP: Nuclear and Particle Physics
AIP: Plasma Science
AIP: Quantum Science and Technology
AIP: Relativity and Gravitation
AIP: Renewable Energy
AIP: Solar Terrestrial and Space Physics
AIP: Synchrotron Science
AIP: Theoretical and Mathematical

ANZCOP
Tracks for Australian and New Zealand Conference on Optics and Photonics

ANZCOP: Astrophotonics
ANZCOP: Atom optics
ANZCOP: Biophotonics
ANZCOP: Fibre & communications
ANZCOP: Lasers
ANZCOP: Metaoptics and plasmonics
ANZCOP: Microscopy, spectroscopy and imaging
ANZCOP: Nanophotonics, metaoptics and plasmonics
ANZCOP: Nonlinear optics and photonics
ANZCOP: Novel materials
ANZCOP: Optical sensors
ANZCOP: Optoacoustics
ANZCOP: Photonic integration and fabrication
ANZCOP: Quantum optics
ANZCOP: THz

WSOF
Tracks for 7th International Workshop on Specialty Optical Fibres and Their Applications

WSOF: Advances and new developments in specialty fibres

WSOF: Photonic crystal, microstructured, and hollow core fibers

WSOF: Fibre lasers

WSOF: Novel materials

WSOF: Nonlinear optics

WSOF: Fibre sensors

WSOF: Novel manufacturing: 3D printing, postprocessing, coatings

WSOF: Advanced analysis: wavefront shaping, machine learning

WSOF: Industrial applications and commercialisation

COMMAD
Tracks for the Conference on Optoelectronic and Microelectronic Materials and Devices

COMMAD: Semiconductor materials, devices, and technologies

COMMAD: Emerging materials: 2D, oxide, organic, and perovskite materials

COMMAD: Semiconductor manufacturing technologies

COMMAD: Advanced materials growth and synthesis

COMMAD: Materials and device characterisations
COMMAD: Nano/micro-fabrication and processing

COMMAD: Advanced computational and machine learning methods in photonics, nanoelectronics, and devices

COMMAD: Flexible electronics, nonlinear optical materials, and wearable technologies

COMMAD: Photonic integrated circuits, semiconductor lasers, LEDs, photodetectors, and modulators

COMMAD: Topological and photonic crystal lasers

COMMAD: Solar cells, thermoelectricity, fuel cells, power electronics, and green-energy devices

COMMAD: Biomedical integrated circuits and implantable devices

COMMAD: Quantum computing and circuits

COMMAD: Nanoelectronic and nanophotonics

PQS2022

PQS: Precision and Quantum Sensing Workshop

PLENARY

Plenary
This track is reserved for invited plenary speakers

Focused Sessions
The culture of Physics and Research

Metaphotonics and Metasurfaces

Unveiling emergent physics of novel functional materials with neutron scattering

Australia’s future in gravitational wave physics and astrophysics

Time Crystals

National vision for nuclear science and applications

Strong interaction dynamics and the pursuit of fundamental symmetries

Quantum Biotechnology

AIP session in honor of Tony Klein