



# Conference Program

| Time | Event |
|------|-------|
|------|-------|

## Tue 10<sup>th</sup> November

|                           |                  |                                                                                                           |
|---------------------------|------------------|-----------------------------------------------------------------------------------------------------------|
| Rivera Room               | 11:00            | TMOS Planning Day<br>Chief Investigators, Research Program<br>Managers and Flagship Program Managers only |
| Green Room<br>Bar         | 16:00            | Registration                                                                                              |
| Wrest Point<br>Front Lawn | 18:00            | Welcome to Country - NITA Education                                                                       |
| Green Room<br>Bar         | 18:30<br>- 21:00 | Welcome Function                                                                                          |

# Conference Program

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## Day 1

Wed 11<sup>th</sup>

Self Organised Activities  
Beach walk/ Yoga/ Swim

### Derwent Room

9:00 [Welcome comments](#) - Dragomir Neshev, Madhu Bhaskaran & Kenneth Crozier

9:30 [Team building activity - Experiential Edge](#)  
The Sandy Bay Quest, A team adventure in the streets and parks of The Bay

11:00

MORNING TEA

11:20 [Invited: Willie Padilla \(Duke Uni\)](#), "Autonomous Agentic Frameworks for the End-to-End Inverse Design of Electromagnetic Metamaterials"

12:00 [Tuomas Haggren \(ANU\)](#), "All-optical Active Terahertz Metasurfaces for Ultrafast Polarisation Control"

12:15 [Oleg Kameshkov \(ANU\)](#), "Development of Terahertz Meta-Optical Components for Polarisation Control: Polarisers and Waveplates"

12:30 [Tongmiao Fan \(ANU\)](#), "Tailored quantum states from nonlinear metasurfaces"

12:45 [Wei Wen Wong \(ANU\) & Yiyang Cui \(UniMelb\)](#), "Coupling black phosphorus emission with bottom-up III-V microring cavities for mid-infrared lasing"

13:00

LUNCH

14:00 [Invited: Heike Ebendorff-Heidepriem \(Adelaide University\)](#), "Specialty optical glasses and fibres: a powerful platform for the exploration of new concepts and applications"

14:40 [Farid Khoshkhati \(UniMelb\) & Dr Yana Izdebskaya \(ANU\)](#), "Active Colour Tuning of Dielectric Mie voids using Liquid Crystals"

14:55

AFTERNOON TEA

15:15 [Phuong Le \(RMIT\)](#), "Non-volatile tuning of Fano resonances in a phase-change"

15:30 [Gurpreet Singh Gill \(UWA\)](#) "Resolution-Enhanced Spectral Reconstruction Using MEMS Fabry-Pérot Filters"

15:45 [EPD Committee activity - Panel Discussion - Moderator: Toby Severs Millard](#)

16:45 POSTER SESSION

18:30

DINNER - LONGHORN RESTAURANT

### Session 1

Chair:  
Lincoln Clark

### Session 2

Chair:  
Fahia Munna

### Session 3

Chair:  
Yang Yu

# Conference Program

Time

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**Day 2**

Thu 12<sup>th</sup>

Self Organised Activities  
Beach walk/ Yoga/ Swim

**Derwent Room**

|       |                                                                                                                                                                       |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9:00  | DRAGO(n)'s DEN                                                                                                                                                        |
| 10:30 | MORNING TEA                                                                                                                                                           |
| 11:00 | IDEA Committee activity part 1 - Introduction to Cultural Capability workshop - Olga Bryukhovets                                                                      |
| 12:00 | LUNCH                                                                                                                                                                 |
| 13:00 | IDEA Committee activity part 2                                                                                                                                        |
| 14:15 | Invited: <a href="#">Sejeong Kim</a> (SKKU), "Structured light and chiral photonics"                                                                                  |
| 14:55 | <a href="#">Jiajun Meng</a> (UniMelb), "Snapshot MWIR Polarimetric Imaging Enabled by a Metalens"                                                                     |
| 15:10 | <a href="#">Chaohao Chen</a> (UTS) & <a href="#">Yang Yu</a> (ANU), "Filter-free multidimensional eSWIR vision via in-sensor encoding in nanosheet-array photodiodes" |
| 15:25 | AFTERNOON TEA                                                                                                                                                         |
| 15:45 | Invited: <a href="#">Kristinn Gylfason</a> (KTH), "A guide to the design and packaging of silicon photonic MEMS"                                                      |
| 16:25 | <a href="#">Wenwu Pan</a> (UWA), "Metalens-Integrated MWIR HgCdTe Detectors for High Operating Temperature: Front- and Back-Illuminated Architectures"                |
| 16:40 | <a href="#">Wenyi Li</a> (FSU Jena), "Reflective Diffractive Optical Neural Network with Metasurfaces"                                                                |
| 16:55 | FREE TIME                                                                                                                                                             |
| 19:00 | GALA DINNER & AWARDS - WATER FRONT ROOM                                                                                                                               |

**Session 4**

Chair:  
Rohini  
Ramachandran

**Session 5**

Chair:  
Taskil Dastoor

Time

Event

## Day 3

Fri 13<sup>th</sup>

Derwent Room

Self Organised Activities  
Beach walk/ Yoga/ Swim

### Session 6

Chair:  
Srishti

- |       |                                                                                                                    |
|-------|--------------------------------------------------------------------------------------------------------------------|
| 9:00  | Outreach Committee update                                                                                          |
| 9:30  | Invited: <a href="#">Mark Brongersma</a> (Stanford) "The Future of Metamaterials is Soft"                          |
| 10:10 | <a href="#">Deepanshu Chaudhary</a> (ANU), "Nanowire Breath Sensors for Metabolic Health Diagnosis and Monitoring" |

|       |             |
|-------|-------------|
| 10:25 | MORNING TEA |
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### Session 7

- |       |                                                                                                                               |
|-------|-------------------------------------------------------------------------------------------------------------------------------|
| 10:45 | Invited: <a href="#">Irina Kabakova</a> (UTS), "Brillouin and quantum imaging"                                                |
| 11:25 | <a href="#">Rohini Ramachandran</a> , (RMIT) "Portable Multi-Wavelength Optical Sensor for Decentralised Haemoglobin Testing" |
| 11:40 | Awards & Closing                                                                                                              |

|       |       |
|-------|-------|
| 12:00 | LUNCH |
|-------|-------|

# WREST POINT LAYOUT MAP

- Restaurants/Cafés**
- 1 ThePoint Revolving Restaurant
  - 2 Longhorn Smokehouse
  - 3 Kwan Ho
  - 4 The Boardwalk Bistro & Cafe

- Bars**
- 1 Birdcage Bar & Lounge
  - 2 The Green Room Bar
  - 3 Boardwalk Bar
  - 4 Casino Bar

- Gaming**
- 1 Casino&Gaming
  - 2 Boardwalk Gaming
  - 3 Club Forté Lounge

- Accommodation**
- 1 Wrest Point Tower
  - 2 Wrest Point Motor Inn
  - 3 Water Edge

- Photo Opportunity**
- 1 Wrest Point Fountain
  - 2 Wrest Point Lawns
  - 3 Wrest Point Boardwalk

- Function Rooms**
- 1 TheShowroom
  - 2 Tasman Room
  - 3 Plenary Hall
  - 4 Derwent Room
  - 5 Boardwalk Gallery
  - 6 Portlight Bar
  - 7 Wellington Room
  - 8 Riviera Room
  - 9 Mezzanine Boardroom
  - 10 Exhibition Foyer
  - 11 Wellington Foyer
  - 12 Drysdale Room
  - 13 Executive Boardroom
  - 14 Wellington Entrance

- Facilities Key**
- Reception & Guest Services
  - Lift 1, Lift 2, Lift 3, Lift 4
  - Car Park
  - Toilets
  - Information
  - Smoking Area
  - TAXI** Taxi Stand
  - Health Club
  - Bus Stop
  - ATM Machine
  - Laundry

- Points of Interest**
- 1 Wrest Point Kitchen Garden
  - 2 Wrest Point Boardwalk
  - 3 Wrest Point Mini Golf
  - 4 Walkway Trail
  - 5 Duck Crossing
  - 6 Duck Feeding

