

## DAY ONE: PHD DEVELOPMENT

SYDNEY MASONIC CENTRE  
66 GOULBURN STREET, SYDNEY

	<b>OPENING SESSION</b>	
0830 – 0845	<b>Welcome</b>	Professor Wei Xiang, Higher Degree Research Program Coordinator, SmartSat CRC
0850 – 0930	<b>Making the most of your PhD</b>	Panel hosted by Dr Sarah Cannard, Industry Director, SmartSat CRC
0930 – 1030	<b>Diversity &amp; Inclusion Sessions</b>	Roshni Sharma CEO, Vistaar Soft Skills Solutions   • <i>Challenges and opportunities for female STEM careers</i> • <i>How to be a diversity and inclusion champion</i>
1030	<b>MORNING TEA   SPEED NETWORKING SESSION</b>	
1100 – 1200	<b>Communicating your research</b>	Liam Mannix, National Science Reporter, The Sydney Morning Herald Ashford Pritchard, Director, Kicker Communications
1200	<b>LUNCH</b>	
1245 – 1415	<b>PhD Presentations</b> Facilitated by Professor Wei Xiang	<p><b>Compact Clock for Small Satellite Applications</b> Presented by Emily Ahern</p> <p><b>Attack-resilient CubeSat constellations</b> Presented by Joshua Davis</p> <p><b>Building damage estimation after natural disaster using multi satellite source data based on machine learning</b> Presented by Chang Liu</p> <p><b>Fabrication of 3-D wavelength-tuneable photonic crystals for space-based mm-wave, terahertz and infrared communications</b> Presented by Vibor Thapliyal</p> <p><b>Coherent Free-Space Optical Communications (Phase 2)</b> Presented by Skevos Karpathakis (pre-recorded)</p> <p><b>Data Fusion for improving the positional accuracy of wildfire detection using geostationary satellites</b> Presented by Nur Fajar Trihantoro (pre-recorded)</p>
1415	<b>AFTERNOON TEA</b>	
1445 – 1615	<b>PhD Presentations</b> Facilitated by Professor Wei Xiang	<p><b>Using Quantum Entanglement to Remotely Synchronise Clocks</b> Sabrina Slimani</p> <p><b>Using Satellite Data to Locate and Phenotype Plants from Space</b> Presented by Brandon Victor</p> <p><b>Interference modelling, detection, and mitigation for improving spaceborne SAR performance</b> Presented by Nermine Hendy</p> <p><b>Advances in Long-term Water Quality Monitoring through Data Fusion</b> Presented by Trung Dung (Alex) Nguyen</p> <p><b>Deep Learning for Advanced Physical Layer Communications</b> Presented by Kou Tian (pre-recorded)</p> <p><b>'Integration of ground- and satellite- based data to map the Urban Heat Island effect'</b> Presented by Robert Andriambololonaharisoamalala</p>
1615 – 1630	<b>Closing Remarks</b>	Professor Andy Koronios, CEO, SmartSat CRC Professor Wei Xiang, Higher Degree Research Program Coordinator, SmartSat CRC
1630	<b>END OF PHD DAY</b>	

## CONFERENCE WELCOME DINNER

JONES BAY WHARF, DOLTONE HOUSE  
LEVEL 3, 26-32 PIRRAMA ROAD, PYRMONT

	Networking drinks from 1830, Dinner from 1900   Dress code: Smart business dress	
1830 – 2200	<b>Keynote Address</b>	Professor Lisa Harvey-Smith Astrophysicist, Author, Australian Government Women in STEM Ambassador <i>Topic: discussing the images of the James Webb Telescope</i>
2200	<b>END OF DINNER</b>	

## DAY TWO: MAIN CONFERENCE

SYDNEY MASONIC CENTRE  
66 GOULBURN STREET, SYDNEY

	<b>OPENING SESSION</b>			
0830 – 1000	<b>Chair's Welcome</b> Dr Peter Woodgate, Chair, SmartSat CRC	<b>Opening Address</b> Dara Williams, Deputy Head, Australian Space Agency	<b>CEO Acknowledgements</b> Professor Andy Koronios, CEO, SmartSat CRC	<b>Opening Keynote</b> Mr Shane Canney, Chief of Air and Space, DSTG
	<b>MORNING TEA   POSTER SESSION</b>			
	<b>SESSION ONE: TECHNICAL PRESENTATIONS</b>			
	<b>Advanced Systems and Sensors</b> Facilitated by Andrew Barton Research Program Manager, SmartSat CRC		<b>Earth Observation Analysis</b> Facilitated by Craig Williams Research Program Manager, SmartSat CRC	
	<b>Space Jeopardy &amp; Response, S-JAR</b> Presented by Dr Hai-Tan Tran		<b>Enhancing Earth Observation for Maritime Domain Maritime Domain Awareness</b> Presented by George Coulloupas	
1045 – 1215	<b>Compact Clock for Small Satellite Applications- Engineering Model</b> Presented by Dr Sebastian Ng		<b>Proof of Concept &amp; Feasibility study utilising space technologies to advance the aquaculture markets in WA's remote and regional areas (OysterQual)</b> Presented by Dr Kathryn Barker	
	<b>Cyber Security and Resilient Low Earth Orbit Satellite Operations: Development of Cyber worthiness using a Digital Twin Approach – CY-JAR.</b> Presented by Professor Jill Slay (pre-recorded)		<b>Automated instant high-resolution imagery procurement and integration</b> Presented by Scott Owens	
	<b>Ultra Fine Attitude Control via Event-based Star Tracking and Piezoelectric Stabilisation</b> Presented by Dr Yasir Latif		<b>Quantifying the Past and Current Major Australian Floods with SAR and Ether Satellite</b> Presented by Professor Linlin Ge	
	<b>LUNCH   POSTER SESSION</b>			
	<b>SESSION TWO: TECHNICAL PRESENTATIONS</b>			
	<b>Onboard Processing and Earth Observation Instruments</b> Facilitated by Dr Rebecca Allen Capability Demonstrator Leader, SmartSat CRC		<b>Communications and Platforms</b> Facilitated by Mr Peter Kerr Capability Demonstrator Leader, SmartSat CRC	
	<b>Hyperscout and Kanyini</b> Presented by Nadia Sarunic		<b>On-board Processing for Advanced Tactical Communications</b> Presented by Luis Lorenzin	
1315 – 1445	<b>Small satellite energy-efficient on-board AI processing of hyperspectral imagery for Early Fire-Smoke Detection</b> Presented by Dr Eriita Jones		<b>Hybrid Optical/E-Band Correlated Channel Model</b> Presented by Dr Gerald Bolding	
	<b>Onboard Hyperspectral AI: Cal, Panoptic segmentation, estimation</b> Presented by Dr Harshala Gammulle		<b>Panoptes</b> Presented by Associate Professor Mitra Safavi-Naeini	
	<b>OzFuel, Australian Fuel Monitoring from Space</b> Presented by Dr Nicolas Younes		<b>Curtin University and Binar</b> Presented by Renae Sayers	
	<b>AFTERNOON TEA</b>			
	<b>CLOSING SESSION</b>			
1530 – 1615	Dr Carl Seubert Chief Research Officer, SmartSat CRC	Dr Sarah Cannard Industry Director, SmartSat CRC	Professor Andy Koronios CEO, SmartSat CRC	
	<b>END OF CONFERENCE</b>			