



# Speaker Brief – MITRE

## Event details

<b>Date and time</b>	1130-1230, Monday 15 September <b>Please arrive 10 minutes early to allow for security screening.</b>
<b>Venue</b>	Neville Bonner Room, Embassy of Australia 1601 Massachusetts Ave NW, Washington, DC 20036
<b>Format</b>	Presentation and Q&A
<b>Point of contact</b>	Jessica Richman, +1 510 295 9798 Rachel Howard, Austrade, +1 917 650 6309
<b>Speakers</b>	<ul style="list-style-type: none"><li>• Dr. Nima Leclerc, Quantum Research Scientist, MITRE</li><li>• Dr. Sean Oliver, Lead Quantum Physicist, MITRE</li></ul>
<b>Purpose</b>	<ul style="list-style-type: none"><li>• Understand MITRE's role in the quantum technologies ecosystem in the United States and with its allies.</li><li>• Understand how Australian quantum companies can collaborate with MITRE.</li></ul>

## Agenda

Time	Agenda item	Who
11:30-11:32	Opening remarks and speaker introductions	Rachel Howard
11:32-11:37	Introductions (1 min pitch per company)	All
11:37-12:10	Presentation by MITRE (~30 mins) <ul style="list-style-type: none"><li>• Overview of MITRE's role in advancing quantum technologies in the U.S</li><li>• How does MITRE's R&amp;D inform and support government and allied partners on quantum strategy, cybersecurity preparedness, and transition to post-quantum cryptography?</li><li>• MITRE's independent and collaborative roles in fostering cross-sector quantum ecosystem development without commercial conflicts of interest</li><li>• Mechanisms for Australian quantum companies to engage with MITRE research programs in the US and Australia</li><li>• MITRE's approach to supporting U.S. and allied efforts, in creating interoperable quantum systems and standards</li></ul>	Dr. Nima Leclerc  Dr. Sean Oliver
12:10-12:25	Q&A	All
12:25-12:30	Final remarks and session close	Emma Aitken

**Key Points to cover:**

- Overview of MITRE’s role in advancing quantum technologies in the U.S.
- How MITRE’s R&D informs and supports government and allied partners on quantum strategy, cybersecurity preparedness, and transition to post-quantum cryptography.
- MITRE’s independent and collaborative roles in fostering cross-sector quantum ecosystem development without commercial conflicts of interest.
- Mechanisms for Australian quantum companies to engage with MITRE research programs in the US and Australia.
- MITRE’s approach to supporting U.S. and allied efforts, in creating interoperable quantum systems and standards.

**Attendees**

- Dr Paul Grimes PSM, CEO, Austrade
- Rachel Howard, Trade and Investment Commissioner, Austrade
- Jessica Richman, Investment Director, Austrade
- Emma Aitken, Investment Director, Austrade
- Brad Siskavich, Executive VP, BluGlass
- James Walker, Chair, BluGlass
- Dr Jim Rabeau, CEO, DeteQt
- Dr Andrew Dzurak, CEO and Co-Founder, Diraq
- Boyar Naito, VP of Business Development, Diraq
- Dr Andre Saraiva, Head of Solid State Theory, Diraq
- Dr Tom Ohki, CEO and Co-Founder, Emergence Quantum
- Adam Silvester, CEO, Phasor Quantum
- Andy Sayers, CTO, Phasor Quantum
- A/Prof Martin O’Connor, Co-Founder and COO, QuantX Labs
- Mark Luo, CEO, Quantum Brilliance
- Jared Smith, VP of Business Development, Silicon Quantum Computing
- Dr Peter Baines, Senior Director, Commercialisation – Physical Sciences, UniQuest

**Attendee Biographies**

	<p>Dr Paul Grimes brings diverse public sector experience to his role as the Chief Executive Officer of Austrade, spanning senior appointments across state, territory and federal levels of government.</p> <p>In addition to previously serving as Secretary of the NSW Department of Treasury, and NSW Coordinator-General for Environment, Energy and Science, he is a former Secretary of the Australian Government Department of Sustainability, Environment, Water, Population and Communities, and Secretary of the Australian Government Department of Agriculture.</p>
	<p>Since joining Austrade in 2016, Rachel has worked in a variety of roles across the agency including as an export adviser for agribusiness and food clients, in corporate strategy and investment promotion.</p> <p>Most recently, Rachel was the Operations Lead for the International Freight Assistance Mechanism (IFAM) at Austrade. The \$1 billion IFAM program helped Australian agricultural exporters who were disproportionately affected by COVID-19 to keep their airfreight supply chains open, while also facilitating the</p>

<p>Rachel Howard, Trade and Investment Commissioner, <b>Austrade</b></p>	<p>importation of critical health goods in response to the pandemic. Rachel previously worked for Policy Cures Research, a not-for-profit global health think tank.</p>
 <p>Jessica Richman, Investment Director, <b>Austrade</b></p>	<p>Ms. Richman serves as an Investment Director at Austrade. In this capacity, Ms. Richman assists North American quantum, AI and digital infrastructure companies with their launch and expansion into Australia. She also assists Australia quantum and other deep tech companies with their North American expansion.</p> <p>Ms. Richman previously served as a Senior Account Manager at adtech company Manifest (purchased by Rakuten) where she managed a list of clients including Target, Zappos, QVC, and Neiman Marcus, in addition to strategic relationships with Facebook and Twitter.</p>
 <p>Emma Aitken, Investment Director, <b>Austrade</b></p>	<p>Emma is an Investment Director for Critical Technologies with Austrade’s San Francisco Post. In her role, Emma advises companies based in the US west coast region seeking to invest in Australia. Emma holds Bachelor’s Degrees in Commerce and Science, majoring in finance and chemistry. She earned a Master of Science in chemistry from Victoria University of Wellington, New Zealand.</p>
 <p>Brad Siskavich, Executive VP, <b>BluGlass</b></p>	<p>Brad Siskavich has more than 20 years’ experience in developing, marketing and commercialising new technologies in start-up and high-growth environments in the compound semiconductor, photovoltaic (solar), laser, photonics and opto-electronics industries. He has previously worked in senior research and business development roles at companies that include Emcore, Oxford Instruments and Masimo Semiconductor.</p> <p><b>BluGlass</b> (ASX:BLG) is a leading supplier of visible GaN lasers, delivering next-generation precision photonics and custom development for quantum sensing, computing, and communications; as well as defence, aerospace and biotech applications. BluGlass operates state-of-the-art full suite facilities in Australia and the United States.</p>
 <p>James Walker, Chair, <b>BluGlass</b></p>	<p>James is an experienced leader in commercialising technology in new markets. He is currently Executive Chair of BluGlass (ASX: BLG) and Native Mineral Resources (ASX: NMR) as well as Non-executive Director of Digital Wine Ventures (ASX: DW8). James has over 25 years’ experience as a Chartered Accountant and company secretary of various high growth private companies.</p> <p><b>BluGlass</b> (ASX:BLG) is a leading supplier of visible GaN lasers, delivering next-generation precision photonics and custom development for quantum sensing, computing, and communications; as well as defence, aerospace and biotech</p>

	<p>applications. BluGlass operates state-of-the-art full suite facilities in Australia and the United States.</p>
 <p>Dr Jim Rabeau, CEO, <b>DeteQt</b></p>	<p>Dr Jim Rabeau is the co-founder and CEO of DeteQt. With more than 20 years of leadership and innovation experience, Dr Rabeau has been instrumental in developing quantum sensing technology. He has successfully built initiatives at leading organisations such as Deloitte, Microsoft, CSIRO, Inflection and the University of Sydney.</p> <p><b>DeteQt:</b> Using its patented 'diamond-on-silicon' approach, DeteQt is a start-up developing highly sensitive, portable and scalable quantum magnetometers to translate ambient magnetic fields into actionable data, enabling new possibilities in navigation, imaging, and environmental sensing.</p>
 <p>Dr Andrew Dzurak, CEO and Co-Founder, <b>Diraq</b></p>	<p>Professor Andrew Dzurak is an innovator and entrepreneur in the global quantum technologies ecosystem, leading teams in both industry and academia. Prior to launching Diraq, he was the foundational Director (2007-2022) of ANFF-NSW, the NSW node of the Australian National Fabrication Facility. He has published over 200 research papers, with more than 30 papers in Science and Nature group journals, and is co-inventor on more than 30 patents across 12 patent families.</p> <p><b>Diraq</b> is a global leader in silicon quantum dot quantum computing, aiming to achieve full-scale, fault-tolerant quantum computing with millions of qubits on a single chip. Diraq's processors operate at the nanometer scale, leveraging existing silicon chip manufacturing for scalable production.</p>
 <p>Boyar Naito, VP of Business Development, <b>Diraq</b></p>	<p>Boyar Naito's expertise lies at the intersection of technology and business development, where he has successfully managed and launched innovative products, forged key partnerships, and led high-performing teams throughout his career. Prior to his role at Diraq, he held business development roles at CyWare and X, following 15 years at Google.</p> <p><b>Diraq</b> is a global leader in silicon quantum dot quantum computing, aiming to achieve full-scale, fault-tolerant quantum computing with millions of qubits on a single chip. Diraq's processors operate at the nanometer scale, leveraging existing silicon chip manufacturing for scalable production.</p>
 <p>Dr Andre Saraiva, Head of Solid State Theory, <b>Diraq</b></p>	<p>Andre is a solid state physicist and has been providing solutions and support for silicon-based quantum computing for 15 years. He has worked directly with qubit makers in four continents and was an Associate Professor of Physics at the Federal University of Rio de Janeiro.</p> <p><b>Diraq</b> is a global leader in silicon quantum dot quantum computing, aiming to achieve full-scale, fault-tolerant quantum computing with millions of qubits on a single chip. Diraq's processors operate at the nanometer scale, leveraging existing silicon chip manufacturing for scalable production.</p>

 <p>Dr Tom Ohki, CEO and Co-Founder, <b>Emergence Quantum</b></p>	<p>Tom Ohki is a physicist and quantum hardware engineer with deep expertise in quantum systems and control architectures from his work leading research teams at Microsoft Quantum and Raytheon / BBN Technologies. His background spans quantum computing, superconducting systems, and complex electronics.</p> <p><b>Emergence Quantum</b> conducts applied physics research to develop new technologies for future computing platforms and advanced sensors. They build complete integrated systems and prototype key components to deliver enhanced capabilities. By working with clients and partners to define specifications, Emergence Quantum creates customised hardware and infrastructure that provide a significant advantage over generic approaches.</p>
 <p>Adam Silvester, CEO, <b>Phasor Quantum</b></p>	<p>Adam is a Managing Director at Phasor Innovation and the CEO of Phasor Quantum. He brings over 25 years of experience leading advanced technology initiatives across the Defence and Telecommunications sectors. Prior to Phasor, he was a senior engineer at Elbit Systems of Australia.</p> <p><b>Phasor Quantum</b> are experts in quantum technologies, radio frequency and microwave engineering, electromagnetics, and system integration. They supply precision quantum assured navigation solutions for GPS-denied environments using nitrogen-vacancy (NV) center diamond-based sensors, suitable for undersea, surface and airborne operations. Phasor have a dedicated team developing magnetic navigation and surveillance algorithms to complement their hardware.</p>
 <p>Andy Sayers, CTO, <b>Phasor Quantum</b></p>	<p>Andy is a Technical Director at Phasor Innovation and the CTO of Phasor Quantum. Prior to Phasor, he was a senior engineer at Elbit Systems of Australia and CEA Technologies Pty Ltd.</p> <p><b>Phasor Quantum</b> are experts in quantum technologies, radio frequency and microwave engineering, electromagnetics, and system integration. They supply precision quantum assured navigation solutions for GPS-denied environments using nitrogen-vacancy (NV) center diamond-based sensors, suitable for undersea, surface and airborne operations. Phasor have a dedicated team developing magnetic navigation and surveillance algorithms to complement their hardware.</p>
 <p>A/Prof Martin O'Connor, Co-Founder and COO, <b>QuantX Labs</b></p>	<p>Martin O'Connor is a Co-Founder and COO at QuantX Labs as well as the Defence Technologies Theme Leader at the University of Adelaide's Institute of Photonics and Advanced Sensing (IPAS). He has 25 years R&amp;D experience in lasers, optics and nonlinear optics across academic, government and industry settings. At the Defence Science and Technology Organisation, Martin designed and developed solid-state lasers for laser radar and active imaging applications.</p> <p><b>QuantX Labs</b> is a world leader in high-precision timing and quantum sensor technologies, providing foundational hardware and integrated systems for defense and space applications. Their flagship product, the Cryoclock, is one of the world's most precise</p>

	<p>clocks, offering exceptional stability for systems like radar, satellite navigation, and quantum computing.</p>
 <p>Mark Luo, CEO, <b>Quantum Brilliance</b></p>	<p>Mark is the CEO/Co-Founder of Quantum Brilliance. Prior to founding Quantum Brilliance, Mark was a New Venture Manager at CSIRO, in Global Private Capital at QIC, an Investment Banker at Credit Suisse, a Co-Founder of Investing for Charity, an Equity Analyst at Credit Suisse, and in Fixed Income Trading at UBS.</p> <p><b>Quantum Brilliance</b> is focused on the design, fabrication, and manufacturing of compact, durable diamond quantum devices that function at room temperature. This full-stack hardware and software company, with locations in Australia and Germany, is on a mission to facilitate the mass deployment of quantum technology and its integration into everyday devices and high-performance computing systems.</p>
 <p>Jared Smith, VP of Business Development, <b>Silicon Quantum Computing</b></p>	<p>Jared Smith is VP of Business Development at Silicon Quantum Computing. He has a strong track record of driving growth at technology licensing companies in Silicon Valley, with more than \$800 in closed deals. He was previously the Chief Commercial Officer at NuCurrent and the Chief Revenue Officer at Cogniac Corporation. He holds an MBA from Santa Clara University.</p> <p><b>Silicon Quantum Computing (SQC)</b> is a world leader in quantum computing. SQC engineers their own quantum chips with a 0.13 nanometer accuracy: placing phosphorous atoms within pure silicon. This absolute focus on precision and purity has seen their processors achieve leading fidelity and algorithmic benchmarks. SQC has also developed application-specific quantum systems - QML and Simulation - which deliver value to customers in Defence, Telecoms, Financial Services and Energy today.</p>
 <p>Dr Peter Baines, Senior Director, Commercialisation – Physical Sciences, <b>UniQuest</b></p>	<p>Peter is a Chief Executive and Business Leader with extensive experience in research and development information technology organisations. He currently works with the UniQuest team to build commercial relationships and opportunities between industry and The University of Queensland (UQ). Prior to his role at UniQuest, he was a chief executive at GCS (Global Communication System) in Singapore and EMClarity (a millimetre wave radio links company) in Brisbane.</p> <p><b>UniQuest</b> is the commercialisation arm of The University of Queensland. They are representing:</p> <p><b>CatQ:</b> Quantum Error Correction for photonic quantum computers offering a 100X benefit in error correction that dramatically reduces resources needed in large-scale quantum computers.</p> <p><b>LIFE microscope:</b> a simple, low-cost device harnessing quantum optics capable of single-cell imaging and viability assessment without affecting the biological system's native state. This innovation surpasses existing label-free microscopes, which are limited to structural detection.</p> <p><b>Cortisonic:</b> Nano-phononic control and application of high-frequency vibrations on silicon substrate to construct gates and circuits analogous to electrical circuits in silicon chips, except this technology uses potentially one million times less energy.</p>

