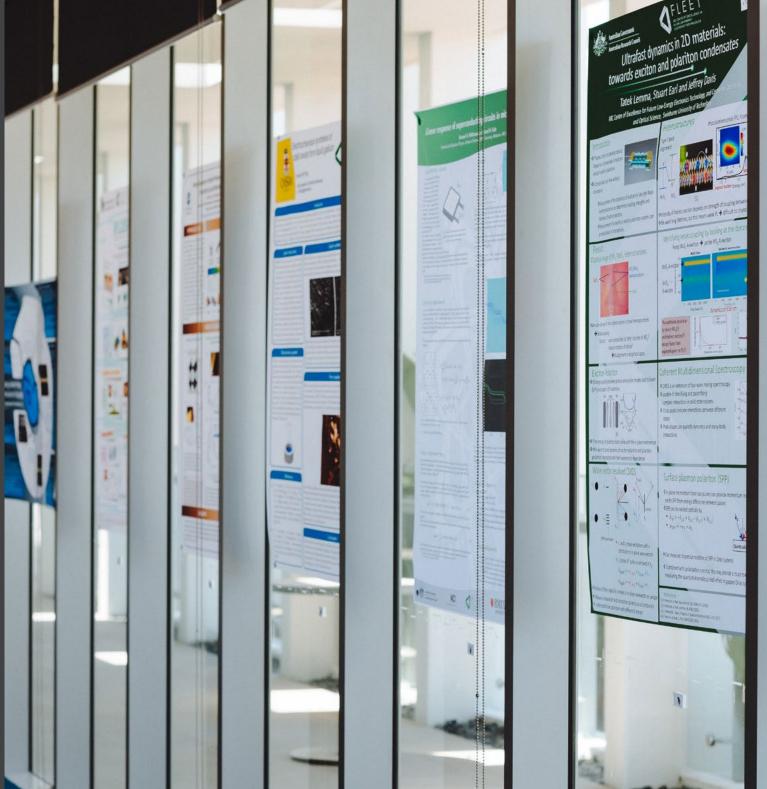


- A3 PRESENTATIONS
- A21 FLEET ORGANISED EVENTS
- A24 OUTREACH ACTIVITIES
- A30 HOME SCIENCE
- A32 MEMBERS IN THE MEDIA



FLEET MEMBER INVOLVED	BOARD / COMMITTEE TYPE	DESCRIPTION
Elena Ostrovskaya, Matthew Davis, Tich-Lam Nguyen, Yuerui Lu	Conference organising committee	ICSCE10 - International Conference on Spontaneous Coherence in Excitonic Systems 2020
Tich-Lam Nguyen, Michael Fuhrer, Qiaoliang Bao	Conference organising committee	ICON-2DMat - 4th International Conference on Two-Dimensional Materials and Technologies 2018
Xiaolin Wang	Conference organising committee	ICONN - International Conference on Nanoscience and Nanotechnology 2018
Alex Hamilton	Conference Program Committee	ICSCE10 - International Conference on Spontaneous Coherence in Excitonic Systems 2020
Elena Ostrovskaya	Conference Program Committee	ICAP - 26th International Conference on Atomic Physics 2018
Elena Ostrovskaya	Conference Program Committee	PLMCN 2019 - 20th International Conference on Physics of Light-Matter Coupling
Elena Ostrovskaya	Journal editorial board	Scientific Reports
Jan Seidel	Journal editorial board	Advanced Electronic Materials (Wiley)
Kourosh Kalantar-zadeh	Journal editorial board	Advanced Materials Technologies
Kourosh Kalantar-zadeh	Journal editorial board	ACS Applied Nano Materials
Matthew Davis	Journal editorial board	SciPost Physics
Matthew Davis	Journal editorial board	European Physical Journal D
Matthew Davis	Journal editorial board	Physical Review Letters
Qiaoliang Bao	Journal editorial board	Nature Publishing Journal: 2D Materials and Applications
Qiaoliang Bao	Journal editorial board	Chinese Optical Letters
Xiaolin Wang	Journal editorial board	Scientific Report
Chris Vale	Scientific advisory committee	Atomic and Molecular Physics (ATMOP) topical group Australian Institute of Phyics
David Cortie	Scientific advisory committee	Australian Neutron Beam Users Group
Jan Seidel	Scientific advisory committee	International Workshop on Topological Structures in Ferroic Materials
Meera Parish	Scientific advisory committee	Scientific committee of the BEC Conference series
Oleg Sushkov	Scientific advisory committee	International Conference on Strongly Correlated Electron Systems, 2019

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Semiclassical wave-packet dynamics and the boltzmann equation	Dimi Culcer	24th Canberra International Physics Summer School – Topological Matter	Australia	8 January 2018	Research Workshop / Symposium	*
Synthesis and optical applications of low- Dimensional metal-halide perovskites	Qiaoliang Bao	24th Canberra International Physics Summer School – Topological Matter	Australia	8 January 2018	Research Workshop / Symposium	*
K.P theory and spin-orbit coupling	Dimi Culcer	24th Canberra International Physics Summer School – Topological Matter	Australia	9 January 2018	Research Workshop / Symposium	*
Topological insulators	Dimi Culcer	24th Canberra International Physics Summer School – Topological Matter	Australia	10 January 2018	Research Workshop / Symposium	*
Dingxin young scholar forum	Qiaoliang Bao	Dingxin young scholar forum	China	15 January 2018	Research Workshop / Symposium	*
Exciton-polariton condensation in Single-shot regime and thomas-fermi limit	Eliezer Estrecho	Research Seminar of Structure and Dynamics Group	Philippines	15 January 2018	Research Seminar	*
Bistability and non-equilibrium Condensation in a driven-dissipative Atomic superfluid	Matt Reeves	International Conference on Spontaneous Coherence of Excitonic Systems 2018 (ICSCE9)	Canada	16 July 2018	Poster	
Non-equilibrium bose-einstein Condensation of exciton-polaritons in the single-shot regime	Eliezer Estrecho	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	29 January 2018	Conference Presentation	
Using qubits as a tool in materials science: unravelling the mystery of two-level defects in amorphous solids	Jared Cole	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	29 January 2018	Conference Presentation	*
Synthesis and optical applications of low- Dimensional metal-halide perovskites	Qiaoliang Bao	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	29 January 2018	Conference Presentation	*
Two-dimensional electronic structure in WTe ₂ thin films	Feixiang Xiang	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	31 January 2018	Conference Presentation	
Spatial charge inhomogeneity in Topological dirac semimetal thin films	James Collins	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	31 January 2018	Conference Presentation	
Surface charge transfer doping of Organic-inorganic hybrid perovskite Nanosheets	Qingdong Ou	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	31 January 2018	Conference Presentation	

^{*} indicates invited presentations to international research community

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
A charge-insensitive single-atom spin-orbit qubit in Si: fully tunable coherence and control	Dimi Culcer	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	1 February 2018	Conference Presentation	*
Topological structures as nanoscale functional elements	Jan Seidel	Georg-August-Universität Göttingen Colloquium	Germany	1 February 2018	Colloquium	*
Anisotropic pauli spin blockade in gaas double hole quantum dots	Daisy Qingwen Wang	International Conference on Nanoscience and Nanotechnology (ICONN 2018)	Australia	2 February 2018	Conference Presentation	*
On-surface synthesis of trinuclear coordination nanostructures	Agustin Schiffrin	The 42nd Condensed Matter and Materials Meeting	Australia	2 February 2018	Conference Presentation	*
Magnetotransport in topological materials	Dimi Culcer	The 42nd Condensed Matter and Materials Meeting	Australia	2 February 2018	Conference Presentation	
Optical characterisation methods (A practical guide)	Daniel Sando	The Annual Summer School on Ferroelectrics (UNSW SSF 2018)	Australia	6 February 2018	Research Workshop / Symposium	*
Introduction to thin films and Fabrication techniques	Daniel Sando	The Annual Summer School on Ferroelectrics (UNSW SSF 2018)	Australia	7 February 2018	Research Workshop / Symposium	*
Exciton-polariton condensate in a box	Elena Ostrovskaya	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	19 February 2018	Conference Presentation	*
Negative-mass effects in atomic spin-orbit coupled and polariton BEC lead to self-interference	David Colas	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	19 February 2018	Poster	
Nonequilibrium phase transition and bistability in a driven-dissipative superfluid	Matthew Davis	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	20 February 2018	Conference Presentation	*
Bose polarons	Jesper Levinsen	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	20 February 2018	Poster	
Enstrophy cascade in decaying 2D quantum turbulence	Matt Reeves	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	20 February 2018	Poster	
Finite-temperature quantum dynamics	Weizhe Liu	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	21 February 2018	Poster	
Observation of negative absolute Temperatures in superfluid vortices	Kristian Helmerson	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zealand	22 February 2018	Conference Presentation	*

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Dynamics of impurities in quantum gases	Meera Parish	Finite Temperature Non- equilibrium Superfluid Systems Workshop (FINESS 2018)	New Zea- land	23 February 2018	Conference Presentation	*
Exciting an ultracold fermi gas	Chris Vale	Center for Ultracold Atoms seminar series	United States	27 February 2018	Research Seminar	*
Panel: research frontiers creating professions of the future	Michael Fuhrer	Universities Australia Higher Education Conference 2018	Australia	28 February 2018	Presentation to NGOs / Professional organisa- tions	
Nonlinear photonics and optoelectronics of 2D materials	Qiaoliang Bao	Research Workshop at Peking University	China	1 March 2018	Research Workshop / Symposium	*
Quantum transport in nanostructures: getting from a to b and all points in between	Jared Cole	Melbourne Condensed Matter Colloquium	Australia	4 March 2018	Colloquium	
Nonvolatile memory based on Reconfigurable ferroelectric domain walls	Pankaj Sharma	American Physical Society March Meeting 2018	United States	5 March 2018	Conference Presentation	
Strong influence of spin-orbit coupling on magnetotransport in two-dimensional hole systems	Hong Liu	American Physical Society March Meeting 2018	United States	6 March 2018	Conference Presentation	
Unusual in-plane field dependence of spin resolved magnetic focussing in 2D hole systems	Matthew Rendell	American Physical Society March Meeting 2018	United States	8 March 2018	Conference Presentation	
Photonics and optoelectronics of 2D materials	Qiaoliang Bao	Research Workshop at Shenzhen University	China	9 March 2018	Research Workshop / Symposium	*
Defect engineering in ferroelectrics: Domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at North Carolina State University	United States	9 March 2018	Research Seminar	*
Defect engineering in ferroelectrics: Domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at University of Texas, Austin	United States	12 March 2018	Research Seminar	*
Defect engineering in ferroelectrics: Domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at Georgia Tech	United States	13 March 2018	Research Seminar	*

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Dynamics of impurities in quantum gases	Meera Parish	Coherent Control of Complex Quantum Systems (C3QS 2018)	Japan	15 March 2018	Conference Presentation	*
Quantum impurities in a bosonic medium	Meera Parish	Research Seminar at Heidelberg University	United States	15 March 2018	Research Seminar	*
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at UC Irvine	United States	15 March 2018	Research Seminar	*
Exact floquet analysis of time- averaged trapping potentials	Oliver Sandberg	Teach at the beach 2018	Australia	16 March 2018	Conference Presentation	
Two-dimensional and three- dimensional topological spin battery theory questions and plans	Jared Cole, Lan Wang	Discussions about potential joint project with Lockheed-Martin	Australia	19 March 2018	Technical Briefing - to government / industry	
Wafer scale synthesis of semiconducting sno monolayers from interfacial oxide layers of metallic liquid tin	Torben Daeneke	255th American Chemical Society National Meeting & Exposition	United States	20 March 2018	Conference Presentation	
Introducing room temperature liquid metals as a reaction solvent for the synthesis of atomically thin 2D metal oxides	Torben Daeneke	255th American Chemical Society National Meeting & Exposition	United States	21 March 2018	Conference Presentation	
Photonics and optoelectronics of 2D materials	Qiaoliang Bao	The 1st Silk Road International Conference on Two-Dimensional Material Sciences and Technology	China	25 March 2018	Research Workshop / Symposium	*
Fermi gases and academia viewed from down under	Chris Vale	Center for Ultracold Atoms lunch- time seminar series	United States	28 March 2018	Research Seminar	*
Liquid metal reaction environment for synthesising new atomically thin metal compounds	Kourosh Kalan- tar-zadeh	Public talk at University of California, Los Angeles, Chemis- try Biochemistry	United States	3 April 2018	Public Lecture	*
Photonics and optoelectronics of 2D materials	Qiaoliang Bao	The 5th International Forum on Graphene	China	11 April 2018	Research Workshop / Symposium	*
The materials science of josephson junctions: modelling transport through them and probing the defects within	Jared Cole	Departmental Seminar - University of Saarland	Germany	11 April 2018	Research Seminar	*
Grand design of novel materials and physical properties for emerging materials science	Xiaolin Wang	Award Seminar at the Chinese Academy of Sciences	China	12 April 2018	Colloquium	*

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
The materials science of Josephson Junctions: modelling transport through them and probing the defects within	Jared Cole	Research Seminar at IBM Research Labs - Zurich		12 April 2018	Research Seminar	*
The materials science of Josephson Junctions: modelling transport through them and probing the defects within	Jared Cole	Departmental Seminar - ETH Zurich	Switzerland	13 April 2018	Research Seminar	*
Photonics and optoelectronics of 2D materials	Qiaoliang Bao	International Symposium on Advanced Materials & Sustainable Technologies (AM&ST18)	Australia	15 April 2018	Research Workshop / Symposium	*
Electronic control at the nanoscale: towards solid interfaces with enhanced electronic and optoelectronic functionalities	Agustin Schiffrin	Colloquium at the University of Melbourne, Department of Physics	Australia	16 April 2018	Colloquium	
Zero resistance materials and technologies	Xiaolin Wang	International Conference on Applied Superconductivity and Electromagnetic Devices (ASEMD2018)	China	16 April 2018	Conference Presentation	*
Impurities in quantum gases	Jesper Levinsen	Conference at Okinawa Institute of Science and Technology Graduate University	Japan	18 April 2018	Poster	
The materials science of Josephson Junctions: modelling transport through them and probing the defects within	Jared Cole	Symposium in Honour of Gerd Schön's 70 th Birthday	Germany	20 April 2018	Research Workshop / Symposium	*
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at Huazhong University of Science and Technology	China	25 April 2018	Research Seminar	*
Universality of an impurity in a BEC	Jesper Levinsen	Tokyo-Melbourne workshop 2018	Japan	25 April 2018	Research Workshop / Symposium	*
Defect engineering in ferroelectrics: Domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at Hubei University	China	26 April 2018	Research Seminar	*
Topological transistors with Na ₃ Bi	Michael Fuhrer	Technical Briefing at Main Sequence Ventures	Australia	3 May 2018	Technical Briefing - to government / industry	
Nanoelectronics based on reconfigurable ferroelectric domain walls	Pankaj Sharma	International Symposium on Applications of Ferroelectrics FMA-AMF-AMEC-PFM (IFAAP) Joint Conference 2018	Japan	28 May 2018	Conference Presentation	*

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Mixed-phase BFO thin films by chemical solution deposition	Peggy Qi Zhang	International Symposium on Applications of Ferroelectrics FMA-AMF-AMEC-PFM (IFAAP) Joint Conference 2018	Japan	28 May 2018	Conference Presentation	
Quantum impurities in a bosonic medium	Meera Parish and Jesper Lev- insen	49th Annual Meeting of the American Physical Society Di- vision of Atomic, Molecular and Optical Physics (DAMOP)	United States	28 May 2018	Conference Presentation	*
Bubble domains and topological transitions in ultrathin epitaxial ferroelectric films	Nagarajan Valanoor	International Symposium on Applications of Ferroelectrics FMA-AMF-AMEC-PFM (IFAAP) Joint Conference 2018	Japan	30 May 2018	Conference Presentation	*
Quantum kinetic theory of transport in topological materials	Dimi Culcer	International Workshop on Materials Physics	Romania	30 May 2018	Conference Presentation	*
Atomically thin films of Na ₃ Bi: A platform for topological electronics	Michael Fuhrer	Research Seminar at Seoul National University	Korea, Republic of	1 June 2018	Research Seminar	*
Impurities in quantum gases	Jesper Levinsen	Research Seminar at Okinawa Institute of Science and Technology Graduate University	Japan	5 June 2018	Research Seminar	*
The future of low energy computing: Dissipationless topological transistors	Oliver Sandberg, Karina Hudson, Isabela Alves de Castro	Idea Factory 2018	Australia	6-8 June 2018	Research Workshop / Symposium	
Quantum kinetic theory of transport in topological materials	Dimi Culcer	Theory Colloquium at Nagoya University	Germany	7 June 2018	Colloquium	*
Low-dimensional coordination Nanostructures on surfaces: towards atomic-scale electronic control	Agustin Schiffrin	Melbourne Condensed Matter Community Workshop	Australia	8 June 2018	Research Workshop / Symposium	
Superconducting electronics: putting the quantum into circuit theory	Jared Cole	Melbourne Condensed Matter Community Workshop	Australia	8 June 2018	Research Workshop / Symposium	
Memory elements based on domain walls in $\mathrm{BiFeO_3}$	Jan Seidel	International Workshop on Topological Structures in Ferroic Materials (TOPO2018)	Brazil	15 June 2018	Conference Presentation	*
Research update at UOW node	Xiaolin Wang	FLEET Centre strategic planning workshop	Australia	18 June 2018	Research Workshop / Symposium	

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
In-situ hydrostatic pressure induced giant enhancement of superconductivity, flux pinning, and Jc in Fe-based superconductors and YBCO-coated con- ductors	Xiaolin Wang	12th International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors (M2S-2018)	China	18 June 2018	Conference Presentation	*
Topological transistors with Na ₃ Bi	Michael Fuhrer	Technical Briefing at IP Group	Australia	21 June 2018	Technical Briefing - to government / industry	
Electric field-tuned topological phase transition in 2D Na ₃ Bi - towards a topological transistor	James Collins	International conference on Novel 2D materials explored via scanning probe microscopy & spectroscopy (2DSPM)	Spain	26 June 2018	Conference Presentation	
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at Tsinghua University	China	28 June 2018	Research Seminar	*
Atomically thin films of Na ₃ Bi: a platform for topological electronics	Michael Fuhrer	International conference on Novel 2D materials explored via scanning probe microscopy & spectroscopy (2DSPM)	Spain	29 June 2018	Conference Presentation	*
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at Sichuan University	China	30 June 2018	Research Seminar	*
Defect engineering in ferroelectrics: from topological domain wall memory to sol-gel thin films with emergent functionalities	Nagarajan Valanoor	Research Seminar at Chongqing University of Science and Technology	China	4 July 2018	Research Seminar	*
Turning 'on' and 'off' topological insulators	James Collins	James Collins' PhD Research Seminar	Australia	5 July 2018	Research Seminar	
Topological critical spin liquids	Oleg Sushkov	Karlsruhe Institute of Technology, Institute of Condensed Matter Theory Research Seminar	Germany	9 July 2018	Research Seminar	*
Quantum kinetic theory of magneto-transport in topological materials	Dimi Culcer	Research Seminar at Beijing Computational Science Research Center	China	13 July 2018	Research Seminar	*
Negative-mass effects: atomic versus polariton superfluids	David Colas	International Conference on Spontaneous Coherence of Exci- tonic Systems 2018 (ICSCE9)	Canada	16 July 2018	Conference Presentation	
Thomas-fermi regime of exciton-polariton condensation in a round box potential	Eliezer Estrecho	International Conference on Spontaneous Coherence of Excitonic Systems 2018 (ICSCE9)	Canada	16 July 2018	Conference Presentation	

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Bistability and non-equilibrium condensation in a driven-dissipative atomic superfluid	Matt Reeves	26th International Conference on Atomic Physics (ICAP 2018)	Spain	23 July 2018	Poster	
Negative-mass effects in spin-orbit coupled bose-einstein condensates	David Colas	26th International Conference on Atomic Physics (ICAP 2018)	Spain	24 July 2018	Poster	
Collective oscillations of a strongly interacting fermi gas	Paul Dyke	26th International Conference on Atomic Physics (ICAP 2018)	Spain	24 July 2018	Poster	
Probing the unitary fermi gas for something to Bragg about	Carlos Claiton Noschang Kuhn	26th International Conference on Atomic Physics (ICAP 2018)	Spain	25 July 2018	Poster	
Electron transport inside Josephson junctions: moving beyond the cartoon picture of barrier tunnelling	Jared Cole	International Workshop on Superconducting Sensors and Detectors	Australia	26 July 2018	Conference Presentation	*
Topological insulator for optoelectronics	Zengji Yue	University of Wollongong- Beihang University Joint Workshop 2018	Australia	28 July 2018	Research Workshop / Symposium	*
Ultra-high figure-of-merit in carbon doped Cu ₂ Se	Xiaolin Wang	11th Asian-Australasian Conference on Composite Materials 2018 (ACCM-11)	Australia	29 July 2018	Conference Presentation	*
Advanced 2D materials for photonics	Qiaoliang Bao	The 13th Pacific Rim Conference on Lasers and Electro-Optics (CLEO-PR 2018)	Australia	29 July 2018	Research Seminar	*
Introduction to fleet	Michael Fuhrer	QinetiQ Monash visit	Australia	30 July 2018	Technical Briefing - to government / industry	
Domain walls and phase boundaries for memory applications	Jan Seidel	Gordon Research Conference on Multiferroic and Magnetoelectric Materials	United States	5 August 2018	Conference Presentation	*
Impurities in quantum gases	Jesper Levinsen	Island Physics 2018 - Advancing quantum technologies in Australia	Australia	7 August 2018	Conference Presentation	*
IR detectors	Michael Fuhrer	Technical Briefing at Mellanox Technologies	Australia	8 August 2018	Technical Briefing - to government / industry	
Zero resistance materials and Technologies	Xiaolin Wang	The 9th Vacuum and Surface Science Conference of Asia and Australia (VASSCAA-9)	Australia	13 August 2018	Conference Presentation	*
Deposition of atomically layer electronic and optical semiconductors	Kourosh Kalantar-zadeh	Technical Briefing at Minetek	Australia	15 August 2018	Technical Briefing - to government / industry	
A charge-insensitive single-atom spin-orbit qubit in si: fully tunable coherence and control	Dimi Culcer	Advanced Scanning Probe Microscopy Workshop (ASPM)	Korea, Republic of	17 August 2018	Conference Presentation	*

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Anomalies in magneto-transport in spin-orbit coupled systems	Dimi Culcer	SPIE Optics and Photonics meeting	United States	19 August 2018	Conference Presentation	*
Topological critical spin liquids	Oleg Sushkov	New Frontiers of Strongly Correlated Electron Materials Workshop	China	22 August 2018	Research Workshop / Symposium	*
Quantum physics research at UNSW	Alex Hamilton	Technical Briefing to Google X	Australia	23 August 2018	Technical Briefing - to government / industry	
Towards topological electronics: epitaxial thin films of topological dirac semimetal Na ₃ Bi	Michael Fuhrer	International Conference on Electronic Materials 2018 (IUMRS-ICEM 2018)	Korea, Republic of	24 August 2018	Conference Presentation	*
Introduction to FLEET	Tich-Lam Nguyen	Bosch Monash Visit and AgTech Capabilities Tour	Australia	27 August 2018	Technical Briefing - to government / industry	
Impurities in quantum gases	Jesper Levinsen	Research Seminar at Harvard	Germany	27 August 2018	Research Seminar	*
Tying electrons into knots: the new science of topological materials	Michael Fuhrer	Monash School of Physics & Astronomy Public Lecture series	Australia	28 August 2018	Public Lecture	
Impurities in quantum gases	Jesper Levinsen	Research Seminar at University of Kaiserslautern	Germany	29 August 2018	Research Seminar	*
Spin wave propagation in nanorods	David Cortie	ANBUG-AINSE Neutron Scattering Symposium (AANSS 2018)	Australia	1 September 2018	Conference Presentation	
Impurities in degenerate quantum matter	Meera Parish	Research Seminar at Massachusetts Institute of Technology	United States	3 September 2018	Research Seminar	*
Piezoresponse force microscopy (PFM) for functional materials characterisation	Jan Seidel	19th International Microscopy Congress (IMC19)	Australia	9 September 2018	Conference Presentation	*
Photonic and optoelectronic device applications based on 2D materials	Qiaoliang Bao	Colloquium at the University of Melbourne	Australia	11 September 2018	Research Workshop / Symposium	
Bio-imaging and sensing systems based on 2D materials and optoelectronic devices	Qiaoliang Bao	Technical Briefing at AFM Pty Ltd	Australia	12 September 2018	Technical Briefing - to government / industry	
Bubble domains and topological transitions in ultrathin epitaxial ferroelectric films	Nagarajan Valanoor	14th International Symposium on Ferroic Domains (ISFD-14)	Spain	12 September 2018	Conference Presentation	*
2D ferromagnetism and spintronic devices based on van der Waals heterostructure	Lan Wang	BIT's 7th Annual World Congress of Advanced Materials	China	14 September 2018	Conference Presentation	*
Hole spin qubits in Si: coherence and control	Dimi Culcer	Spin qubit workshop	Germany	14 September 2018	Conference Presentation	*

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Trapping adam the adam: adventures in floquet land	Oliver Sandberg	Research Seminar at UQ	Australia	16 September 2018	Research Seminar	
Evolution of large-scale flow from turbulence in a two-dimensional superfluid	Kristian Helmerson	Joint Quantum Institute special seminar	United States	18 September 2018	Research Seminar	*
Low-energy electronics: sustainably continuing the information technology revolution	Michael Fuhrer	Materialise: a sustainable future	New Zea- land	19 September 2018	Public Lecture	*
Chemical solution deposition derived bismuth ferrite thin films with excellent performances	Peggy Qi Zhang	Research Seminar at National Chiao Tung University	Taiwan, Province of China	22 September 2018	Conference Presentation	*
Thermoelectric materials	Xiaolin Wang	Technical Briefing at Solar Energy Association, Shandong	China	25 September 2018	Technical Briefing - to government / industry	*
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functional- ities	Nagarajan Valanoor	Research Seminar University Autonoma	Spain	25 September 2018	Research Seminar	*
Evolution of large-scale flow from turbulence in a two-dimensional superfluid	Kristian Helmerson	Center for Ultracold Atoms seminar series	United States	25 September 2018	Research Seminar	*
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at University of Paris-CentraleSuperlec	France	26 September 2018	Research Seminar	*
Defect engineering in ferroelectrics: domain wall memory to bubble domains with emergent functionalities	Nagarajan Valanoor	Research Seminar at National Institute of Applied Sciences of Lyon	France	27 September 2018	Research Seminar	*
Origin of ferroelastic domain wall motion in ferroelectric bilayers	Nagarajan Valanoor	Research Seminar at University of Groningen	Netherlands	3 October 2018	Research Seminar	*
Superconducting electronics: putting the quantum into circuit theory	Jared Cole	Quantum Technology: From concepts to devices and materials	Australia	5 October 2018	Research Workshop / Symposium	
Quantum and statistical fluctuations in critical quantum matter	Oleg Sushkov	Colloquium at UNSW, School of Physics	Australia	9 October 2018	Colloquium	

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PRESENTATION TITLE	ODEAL(ED -	EN (ENTENIANAE		DATE -	DDEOENTATION TYPE	NOTES
PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Defect engineering in ferroelectrics	Nagarajan Vala- noor	Research Seminar Norwegian University of Science and Technology	Norway	10 October 2018	Research Seminar	*
From topological domain wall memory to sol-gel thin films with emergent functionalities	Nagarajan Valanoor	Research Seminar at University of Leeds	United Kingdom	12 October 2018	Research Seminar	*
Towards topological quantum computing: demystifying the first 1d sub-band	Karina Hudson	Australian Institute of Physics Postgraduate Awards	Australia	13 October 2018	Postgraduate presentation/ awards	
The saga of exciton-polariton interactions	Elena Ostrovskaya	International workshop "Quantum Many-Body Approaches in Chemistry and Physics"	Australia	14 October 2018	Research Workshop / Symposium	*
Many-body quantum batteries	Meera Parish	Island Physics 2018 - Advancing quantum technologies in Australia	Australia	14 October 2018	Research Workshop / Symposium	*
Ebb and flow of superfluids far from equilibrium	Matthew Davis	23rd Australian Institute of Physics Congress	Australia	16 October 2018	Conference Presentation	*
Bio-imaging and sensing systems based on 2D materials and optoelectronic devices	Qiaoliang Bao	Technical Briefing at AMNY medial Pty Ltd	Australia	16 October 2018	Technical Briefing - to government / industry	
Two dimensional aluminium oxides for filtering heavy metal ions	Kourosh Kalantar-zadeh	Technical Briefing at Merck Australia	Australia	18 October 2018	Technical Briefing - to government / industry	
Exciting sounds in fermi superfluids	Chris Vale	Island Physics 2018 - Advancing quantum technologies in Australia	Australia	19 October 2018	Conference Presentation	*
Atomically thin materials for future low-energy electronics technologies	Michael Fuhrer	First Australian-European Graphene Flagship Workshop	Australia	19 October 2018	Research Workshop / Symposium	*
Photonic and optoelectronic device applications based on 2D materials	Qiaoliang Bao	Asian Conference on Nanoscience & Nanotechnology (AsiaNANO 2018)	China	19 October 2018	Research Workshop / Symposium	*
Photonics and optoelectronics of 2D materials	Qiaoliang Bao	Monash-Southeast University- Jiangsu Industrial Technology Research Institute Joint Symposium	China	21 October 2018	Research Workshop / Symposium	*
A charge-insensitive single-atom spin- orbit qubit in si: fully tunable coherence and control	Dimi Culcer	Colloquium at University of Kaiserslautern	Japan	22 October 2018	Research Workshop / Symposium	*
Quantum kinetic theory of magne- to-transport in topological materials	Dimi Culcer	Research Seminar at Osaka University	Japan	23 October 2018	Research Seminar	*
Low-lying excitation spectra of a unitary fermi gas	Carlos Claiton Noschang Kuhn	FLEET Research Seminar	Australia	25 October 2018	Research Seminar	

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PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Green synthesis of low -dimensional materials using liquid metal reaction media: application in high flux membranes	Ali Zavabeti	The 3rd International Conference on Emerging Advanced Nanoma- terials (ICEAN 2018)	Australia	31 October 2018	Conference Presentation	
Plasmon resonances of highly doped two-dimensional ${\rm MoO_3}$ and ${\rm MoS_2}$	Kourosh Kalantar-zadeh	The 3rd International Conference on Emerging Advanced Nanomaterials (ICEAN 2018)	Australia	31 October 2018	Conference Presentation	*
2D ferromagnetism and spintronic devices based on van der waals heterostructure	Lan Wang	The 3rd International Conference on Emerging Advanced Nanomaterials (ICEAN 2018)	Australia	31 October 2018	Conference Presentation	*
Photonic and optoelectronic device applications based on 2D materials	Qiaoliang Bao	The 3rd International Conference on Emerging Advanced Nanomaterials (ICEAN 2018)	Australia	31 October 2018	Conference Presentation	*
Topological critical spin liquids.	Oleg Sushkov	Asia-Pacific Workshop "In Frontier of Condensed Matter Physics"	China	2 November 2018	Research Workshop / Symposium	*
Photonics and optoelectronics of 2D materials	Qiaoliang Bao	Australia-China Youth Dialogue	Australia	4 November 2018	Research Workshop / Symposium	*
Low-lying excitation spectra of a unitary fermi gas	Carlos Claiton Noschang Kuhn	Advances In Quantum Simulation With Ultracold Atoms Workshop	Brazil	9 November 2018	Conference Presentation	*
Domain walls and phase boundaries for memory applications	Jan Seidel	10th Asia-Pacific Conference on Theoretical Physics Workshop on Multiferroics	Korea, Republic of	12 November 2018	Conference Presentation	*
Donor clusters: ground state, exchange and future prospects	Dimi Culcer	Silicon Quantum Electronics Workshop	Australia	15 November 2018	Conference Presentation	*
2D materials photonics and optoelectronic device applications	Qiaoliang Bao	Research Workshop at University of Science & Technology Beijing	China	16 November 2018	Research Workshop / Symposium	*
Donor clusters: ground state, exchange and future prospects	Dimi Culcer	Research Seminar at Beijing Computational Science Research Center	China	20 November 2018	Research Seminar	*
Tuning functional properties of BiFeO ₃ thin films using strain and growth chemistry	Daniel Sando	Symposium on Nanostructured Materials and Interfaces, 6th Conference of the Combined Australian Materials Societies (CAMS2018)	Australia	27 November 2018	Conference Presentation	*

^{*} indicates invited presentations to international research community

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Domain walls and phase boundaries for memory applications	Jan Seidel	Symposium on Nanostructured Materials and Interfaces, 6th Conference of the Combined Australian Materials Societies (CAMS2018)	Australia	27 November 2018	Conference Presentation	*
Chemical solution deposition derived bismuth ferrite thin films with excellent performances	Peggy Qi Zhang	Research Conference at UoW	Australia	27 November 2018	Conference Presentation	
Photonics and optoelectronics of 2D material	Qiaoliang Bao	Symposium on Nanostructured Materials and Interfaces, 6th Conference of the Combined Australian Materials Societies (CAMS2018)	Australia	27 November 2018	Research Workshop / Symposium	
Surface properties of liquid metals	Ali Zavabeti	Research Seminar at Nanjing University of Aeronautics and Astronautics	China	30 November 2018	Research Workshop / Symposium	*
Van der waals epitaxy of the quantum spin hall candidate 1t'-WTe ₂	Bent Weber	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Lateral superlattices in gaas: how to make "anti-graphene"	Daisy Qingwen Wang	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Homogeneous exciton-polariton condensates in a box potential	Eliezer Estrecho	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Quantum anomaly and progress towards p-wave superfluidity in a 2D fermi gas	Ivan Herrera	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Benchmarking of localised basis sets for the two-dimensional allotropes of bismuth	Jackson Smith	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Emergent spin gap, spin-mixing and the 0.7 anomaly in quantum point contacts with strong spin-orbit interaction	Karina Hudson	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Single-atom cobalt covalently bound to distorted 1t-MoS ₂ with ensemble effect for unprecedented hydrogen evolution catalysis	Kun Qi	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Diffusion length in exciton-polariton system	Maryam Boozarjmehr	FLEET Annual Workshop	Australia	2 December 2018	Poster	

^{*} indicates invited presentations to international research community

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Band properties of a 2D electron gas at a molecule-metal interface	Matthew Hendy	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Double quantum dots in p-Ge	Matthew Rendell	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Trapping adam the adam: adventures in floquet land	Oliver Sandberg	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Vortex pinning in two-dimensional superfluids	Oliver Stockdale	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Hyloscopy	Pavel Kolesnichenko	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Strong depletion in hybrid perovskite p–n junctions induced by local electronic doping	Qingdong Ou	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Electrochemical synthesis of transition metal thin films	Rebecca Orrell-Trigg	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Electron dynamics in 2D lattices with out-of-plane magnetic field	Samuel Wilkinson	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Elementary excitations of a Fermionic superfluid with strong inter-particle interactions	Sascha Hoinka	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Ultrafast dynamics in 2D materials towards BEC	Tatek Lemma	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Liquid metal facilitated synthesis of functional 2D materials	Torben Daeneke	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Transport properties of Two-dimensional electron gas with Rashba and Zeeman effects	Yik Kheng Lee	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Device fabrication for 2D magnet and exciton superfluid	Yun Li	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Electron dynamics in 2D lattices with out-of-plane magnetic field	Zeb Krix	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Realisation of flat band with possible nontrivial topology in electronic Kagome lattice	Zhi Li	FLEET Annual Workshop	Australia	2 December 2018	Poster	

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Non-equilibrium state of 1D superfluid Bose-Einstein at zero temperature	Zhi-Tao Deng	FLEET Annual Workshop	Australia	2 December 2018	Poster	
Effect of spin-charge disorder correlation on the ahe in 2D dirac fermions	Aydin Keser	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Probing the unitary fermi gas for something to Bragg about	Carlos Claiton Noschang Kuhn	FLEET Annual Workshop	Australia	3 December 2018	Poster	
A volatile polymer stamp for large-scale transfer and assembly of two-dimensional heterostructures	Changxi Zheng	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Hard magnetic properties in nanoflake van der Waals Fe ₃ GeTe ₂	Cheng Tan	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Negative-mass effects in spin-orbit coupled Bose-Einstein condensates	David Colas	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Periodic coloumb blockade in single-component 2D molecular nanoarray	Dhaneesh Gopalakrishnan	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Electrically-induced ferroelectric-like behavior in LaAlO ₃ /SrTiO ₃ oxide heterostructure	Fan Ji	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Cross-sectional scanning tunnelling microscopy (XSTM) study on perovskite oxide materials	Fei Hou	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Surface plasmon polaritons (SPPS) in nanocavities	Gary Beane	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Microscopic description of exciton- polaritons	Guangyao Li	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Nonlinear light-matter interactions in two-dimensional materials and their photonic applications	Haoran Mu	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Interfacial superconductivity through charge transfer	Jackson Wong	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Electric field-tuned topological phase transition in ultra-thin Na ₃ Bi – towards a topological transistor	James Collins	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Implementing an efficient model for phonon dissipation in NEGF using Buttiker Probes	Jesse Vaitkus	FLEET Annual Workshop	Australia	3 December 2018	Poster	

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Influence of quantum confinement on the blueshifts of optically trapped exciton-polaritons below condensation threshold	Maciej Pieczarka	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Giant vortex clusters in a two-dimensional quantum fluid	Matt Reeves	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Multiferroic control of a 2DEG: growth and characterisation	Oliver Paull	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Nanoscale bubble domains in ultrathin ferroelectric films	Peggy Qi Zhang	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Adiabatic spin polarisation in quantum poin contacts	Samuel Bladwell	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Evolution of large-scale flow from turbulence in a two-dimensional superfluid	Shaun Johnstone	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Ultrafast dynamics in floquet systems	Shilpa Sanwlani, Stuart Earl, Jeff Davis	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Granular aluminium-oxide thin films: the role of morphology in controlling sheet resistance	Tommy Bartolo	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Nanoscale domains in thin ferroelectric films by tuning of depolarisation field	Vivasha Govinden	FLEET Annual Workshop	Australia	3 December 2018	Poster	
MoSi ₂ thin films	Wafa Afzal	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Transport evidence of robust 2D surface states in bulk-insulating topological insulator single crystals	Weiyao Zhao	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Quantum impurity dynamics	Weizhe Liu	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Fabricating shallow 2D systems in GaAs/AlGaAs heterostructures towards the creation of artificial graphene	Yonatan Ashlea Alava	FLEET Annual Workshop	Australia	3 December 2018	Poster	

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
MoSe ₂ Excited state biexcitons in atomically thin MoSe ₂	Yuerui (Larry) Lu	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Device fabrication of 2D magnet and exciton superfluid	Yun Li	FLEET Annual Workshop	Australia	3 December 2018	Poster	
Light-transformed materials - research theme 3 updates	Kristian Helmerson, Marina Castelli, Stuart Earl, Jesper Levinsen, Cornelius Krull	FLEET Annual Workshop	Australia	3 December 2018	Research Workshop / Symposium	
Centre operating initiatives: equity & diversity, mentoring, outreach and performance	Tich-Lam Nguyen, Michael Fuhrer, Elena Ostrovskaya, Chris Vale, Matthew Davis, Dianne Ruka	FLEET Annual Workshop	Australia	3 December 2018	Research Workshop / Symposium	
Atomically-thin materials - enabling technology theme A research updates	Xiaolin Wang, Kourosh Kalantar-zadeh, Cheng Tan, Daniel Sando, Zengji Yue, Zhi Li	FLEET Annual Workshop	Australia	3 December 2018	Research Workshop / Symposium	
Periodic coulomb blockade in single-component 2D molecular nanoarray	Dhaneesh Gopalakrishnan	FLEET Annual Workshop	Australia	4 December 2018	Poster	
Topological materials - research theme 1 updates	Alex Hamilton, Michael Fuhrer, Aydin Keser, Nikhil Medhekar, Oleh Klochan, Oleg Sushkov, Jackson Smith	FLEET Annual Workshop	Australia	4 December 2018	Research Workshop / Symposium	
Nanodevice fabrication - enabling technology theme B research updates	Lan Wang, Torben Daeneke, Jan Seidel, Kou- rosh Kalantar-za- deh, Nuriyah Aloufi, Yonatan Ashlea Alava	FLEET Annual Workshop	Australia	4 December 2018	Research Workshop / Symposium	

PRESENTATION TITLE	SPEAKER	EVENT NAME	COUNTRY	DATE	PRESENTATION TYPE	NOTES
Fabrication of electronic devices based on van der Waals heterostructures	Nuriyah Aloufi	FLEET Annual Workshop	Australia	4 December 2018	Research Workshop / Symposium	
Excitonic materials - research theme 2 updates	Matthew Davis, Qiaoliang Bao, Yuerui (Larry) Lu, Meera Parish, Matthias Wurdack	FLEET Annual Workshop	Australia	5 December 2018	Research Workshop / Symposium	
Trapping adam the adam: adventures in floquet land	Oliver Sandberg	EQUS Annual Workshop	Australia	6 December 2018	Poster	
Variational approach for modelling Bose polarons at finite temperature	Bernard Field	23rd Australian Institute of Physics Congress	Australia	9 December 2018	Poster	
Evolution of large-scale flow from turbulence in a two-dimensional superfluid	Kristian Helmerson	23rd Australian Institute of Physics Congress	Australia	10 December 2018	Conference Presentation	*
Bistability and non-equilibrium condensation in a driven-Dissipative atomic superfluid	Matt Reeves	23rd Australian Institute of Physics Congress	Australia	10 December 2018	Poster	
Spatially-dependent charging in a single-component organic nanofilm on a metal	Dhaneesh Gopalakrishnan	23rd Australian Institute of Physics Congress	Australia	11 December 2018	Conference Presentation	
Negative-mass effects in spin-orbit coupled Bose-Einstein condensates	David Colas	23rd Australian Institute of Physics Congress	Australia	13 December 2018	Conference Presentation	
Low-dimensional organic nano- structures on surfaces: Towards nanoscale control of interfacial (opto)electronic properties	Agustin Schiffrin	4th International Conference on 2D Materials and Technologies (ICON-2DMAT 2018)	Australia	13 December 2018	Conference Presentation	*
Thickness-dependent electronic structure in WTe ₂ thin films	Feixiang Xiang	4th International Conference on 2D Materials and Technologies (ICON-2DMAT 2018)	Australia	13 December 2018	Conference Presentation	*
Synthesis of 2D SnS materials for piezoelectric nanogenerator applications	Hareem Khan	4th International Conference on 2D Materials and Technologies (ICON-2DMAT 2018)	Australia	13 December 2018	Conference Presentation	
The many uses of optical forces - Art Ashkin's legacy	Kristian Helmerson	Victorian chapter of AIP lecture on 2018 Nobel prize in Physics	Australia	13 December 2018	Public Lecture	
Topological structures as nanos- cale functional elements	Jan Seidel	Workshop on Atomic Force Microscopy for Advanced Func- tional Materials (AFM2 2018)	China	14 December 2018	Conference Presentation	*

FLEET ORGANISED WORKSHOP / SEMINAR TITLE	EVENT TYPE	DATES	LOCATION
24 th Canberra International Physics Summer School 2018 - Topological Matter	Summer / Winter Schools on specialised scientific topics	3 - 18 January 2018	ANU
Chasing the Quantum Anomalous Hall Effect in oxides	FLEET research workshop	6 January 2018	UNSW
Summer School in Ferroelectrics	Summer / Winter Schools on specialised scientific topics	4 - 9 February 2018	UNSW
Prof Laurent Bellaiche (University of Arkansas): Topological defects in ferroelectrics and multiferroics	Research Seminar	2 May 2018	Monash
Prof Shuyun Zhou (Tsinghua University): Two-dimensional materials and heterostructures for new topological phases and tailored electronic structures	Research Seminar	2 June 2018	Monash
FLEET-MacDiarmid Institute collaborative workshop: Tomorrow's Electronic Devices	International Conference	7 - 8 February 2018	MacDiarmid Institute
Asia-Oceania Neutron Scattering Association (AONSA) 9th Neutron School	Summer / Winter Schools on specialised scientific topics	13 February - 15 May 2018	Menai, NSW
Cu-based thermoelectric materials	Research Seminar	8 March 2018	UOW
Dr Vladislav Kataev (Leibniz Institute for Solid State and Materials Research): High-field magnetic resonance spectroscopies on spin-correlated quantum matter	Research Seminar	10 March 2018	UNSW
Dr Blanca Biel (University of Granada): Electronic properties and SPM characterisation of transition metal dichalcogenides	Research Seminar	14 March 2018	Monash
Tall Poppy Information Session	Research Development	21 March 2018	Monash
Dr Jennifer MacLeod (Queensland University of Technology): Molecular nanoarchitectures from on-surface reactions and assembly	Research Seminar	22 March 2018	Monash
Melbourne Condensed Matter Colloquium	Research Seminar	3 April 2018	RMIT
Atomic Force Microscopy	Lecture Workshop	28 April - 27 July 2018	UNSW
FLEET @ UNSW Research Update	FLEET research workshop	30 April 2018	UNSW
Thin film X-ray Diffraction (XRD) Tutorial	Research Development	7 May 2018	UNSW
Prof Wen-Xin Tang (Chongqing University): Surface electron microscopy and its applications on two-dimensional materials	Research Seminar	10 May 2018	Monash
Idea Factory 2018	Research Development	6 - 8 June 2018	Caloundra, QLD
2D ferromagnetism and spintronic devices based on van der Waals heterostructures	Research Seminar	6 June 2018	UOW
Melbourne Condensed Matter Community Workshop	Research Seminar	6 August 2018	Swinburne
FLEET strategic planning workshop	FLEET research workshop	12 - 13 June 2018	Monash
International Workshop on Topological Structures in Ferroic Materials	International Conference	12 - 16 June 2018	Natal, Brazil

FLEET ORGANISED WORKSHOP / SEMINAR TITLE	EVENT TYPE	DATES	LOCATION
FLEET Outreach Training	Professional Development	19 July 2018	UNSW
A/Prof Shaffique Adam (NUS): Why do strongly interacting Dirac fermions in two-dimensions appear weakly interacting?	Research Seminar	20 July 2018	UNSW
A/Prof Shaffique Adam (NUS): Interactions of dirac fermions in two-dimensional systems	Research Seminar	8 January 2018	Monash
Island Physics	International Conference	6 - 9 August 2018	Magnetic Island, QLD
Prof Atsushi Fujimori (University of Tokyo): Soft x-ray spectroscopy of magnetic materials for spintronics	Research Seminar	8 August 2018	Monash
Dr Mark Edmonds (Monash University): Electric induced topological phase transition in ultra thin Na ₃ Bi	FLEET-wide colloquia	23 August 2018	Monash
Prof Amadeo Vázquez de Parga (Universidad Autónoma de Madrid): Graphene as playground for molecule: From physisorption to catalysis	Research Seminar	18 September 2018	Monash
Dr David Colas (UQ): Negative-mass effects in atomic and polariton superfluids	FLEET-wide colloquia	20 September 2018	UQ
Dr Yi Du (UoW): Elemental 2D materials (xenes) beyond graphene	Research Seminar	27 September 2018	Monash
FLEET Outreach Training	Professional Development	10 April 2018	Monash Tech School
FLEET equity & diversity - member survey outcomes	Equity & Diversity	12 October 2018	Magenta, NSW
Nature editorial workshop	Professional Development	12 October 2018	Magenta, NSW
Prof Nancy Sandler (Ohio University): Strain enhancement of kondo effect in graphene	Research Seminar	12 October 2018	Monash
YouRform: Got PhD, What Next?	Professional Development	17 October 2018	UNSW
Monash Energy Materials and Systems Institute (MEMSI): Monash Energy Showcase	Industry Engagement	18 October 2018	Monash
Dr Carlos Kuhn (Swinburne): Low-lying Excitation Spectra of a Unitary Fermi Gas	FLEET-wide colloquia	25 October 2018	Swinburne
Prof Ding Zhang (Tsinghua University): Emergent superconductivity in few-layer stanene and superconductor-insulator transitions in BSCCO flakes	Research Seminar	2 November - 2 December 2018	UNSW
Prof Yijin Zhang (Max Planck Institute for Solid State Research): Optoelectronic functionalities in transition-metal dichalcogenides	Research Seminar	11 February 2018	UNSW
Prof Garnett Bryant (National Institute of Standards and Technology): Hole spin qubits in quantum dots and quantum dot molecules with electric and magnetic fields	Research Seminar	16 November 2018	UNSW
Prof Götz S. Uhrig (Technical University of Dortmund): Electronic and nuclear spins in driven quantum dots: Paradigm for non-equilibrium states with induced coherence	Research Seminar	22 November 2018	UNSW

FLEET ORGANISED WORKSHOP / SEMINAR TITLE	EVENT TYPE	DATES	LOCATION
Prof Alex Hamilton (UNSW): Semiconductor holes - more spin for your buck	Research Seminar	26 November 2018	Monash
FLEET 2018 Annual Workshop	Centre Conference/Workshop	2 - 5 December 2018	Magenta, NSW
Prof Ali Yazdani (Princeton University): Visualizing Quantum Hall liquids and their boundary modes	Research Seminar	12 July 2018	UNSW
Dr Luigi Colombo (UT Dallas): 2D Materials - Translation from Lab to Industry	Research Seminar	12 July 2018	UNSW
4 th International Conference on 2D Materials and Technologies (ICON-2DMAT 2018)	International Conference	10 - 13 December 2018	Melbourne
Second Summer School on Ferroelectrics	Summer / Winter Schools on specialised scientific topics	10 - 14 December 2018	UNSW

NAME OF EVENT	DATES	AUDIENCE TYPE	LOCATION	NO. OF AUDIENCE
Designing and building levitating superconductor track	4 December 2017 - 2 February 2018	Public	Monash	
Lecturer at Topological Matter Summer School at ANU	8 January - 19 February 2018	Research community	ANU	100
InspireU Senior Engineering camp for Aboriginal and Torres Strait Islander Studies students	17 January 2018	School students	Brisbane, QLD	25
Projects for computational physics	18 January 2018	Undergraduate students	Zamboanga City, Philippines	20
Meeting with UNSW teaching representative David Budden	22 January 2018	School teachers	UNSW	3
Monash Tech School visit	24 January 2018	School teachers	Monash	2
Science Snippet	8 February 2018	School students	John Monash Sci- ence School	10
Meeting with UNSW teaching representative David Budden	13 February 2018	School teachers	UNSW	10
Center for Ultracold Atoms - FLEET Outreach presentation	13 February 2018	Research community	MIT, USA	15
Victorian Certificate of Education Physics Conference	16 February 2018	School teachers	Melbourne, VIC	50
BSc Advanced - Research, introductory camp for incoming students	22 February 2018	Undergraduate students	Olinda, VIC	30
Lab tours and talk - Year 11 students	22 February 2018	School students	UNSW	20
School visit - Year 11 students	22 February 2018	School students	Sydney, NSW	10
Supervising Year 12 Work Experience	1 March - 1 September 2018	School students	ANU	1
School visit and activity	9 March 2018	School students	Edinburgh College	27
Researcher interviews	10 March 2018	Undergraduate students	UQ	2
Girls in Physics Breakfast	13 March 2018	School students	Hawthorn, VIC	60
Monash Tech School - teacher lab tour	16 March 2018	School teachers	Monash	15
Meeting about 1 min physics animation	21 March 2018	Public	UNSW	
Quantum Games	23 - 25 March 2018	Public	Brisbane, QLD	1000
Monash School of Physics & Astronomy Public Lecture	27 March 2018	Public	Monash	30
Monash Tech School student lab tour - Ashwood School	27 March 2018	School students	Monash	25
Monash Tech School student lab tour - Glenallen School	28 March 2018	School students		

NAME OF EVENT	DATES	AUDIENCE TYPE	LOCATION	NO. OF AUDIENCE
International Experience Day	29 March 2018	School students	Monash	32
Monash Tech School student lab tour - Monash Special Developmental School	29 March 2018	School students	Monash	10
Talented Students Program School of Mentor	31 March - 31 May 2018	School students	UNSW	
Drawing sketches for 3D animation	31 March 2018	Other professional organisations and bodies	Swinurne	1
Prof Bala Kavaipatti (Indian Insitute of Technology Bombay) visit & lab tour	5 April 2018	Research community	UNSW	
Junior Physics Olympiad workshop	7 April 2018	School students	Brisbane, QLD	80
Student lab tour	7 April 2018	School students	Monash	5
Indigenous student outreach	10 April 2018	School students	Brisbane, QLD	4
Adam Bandt lab tour at RMIT	17 April 2018	Government	RMIT	1
Outreach meeting - UNSW Science	17 April 2018	School students	UNSW	
John Monash Science School Thai Exchange Program - laser activity	24 April 2018	School students	Monash	10
School visit and activity	27 April 2018	School students	Edinburgh College	26
Monash Tech School - teacher lab tour	30 April 2018	School teachers	Monash	24
Melbourne Knowledge Week	6 - 12 May 2018	Public	Melbourne, VIC	400
Monash Tech School student lab tour - Brentwood Secondary College	8 May 2018	School students	Monash	20
Physics in the Pub	11 May 2018	Public	Hawthorn, VIC	80
Volunteer presentation at Pint of Science	14 - 15 May 2018	Public	Wollongong, NSW	40
Monash Tech School student lab tour - South Oakleigh College	15 May 2018	School students	Monash	
Minister of Education and Training Simon Birmingham and Minister for International Development and the Pacific Concetta Fierravanti-Wells visit & lab tour UoW	22 May 2018	Government	UOW	15
Binary Lesson Plan and visit to Scots College	23 May 2018	School students	Scots College, NSW	52
Monash Tech School student lab tour - Wellington Secondary College	23 May 2018	School students	Monash	21
Lab tour for year 10 students	23 May 2018	School students	Swinburne	

NAME OF EVENT	DATES	AUDIENCE TYPE	LOCATION	NO. OF AUDIENCE
Light show to Year 5 & 6 students	24 May 2018	School students	St Fancis Xavier School, VIC	85
CSIRO STEM Professionals meeting	24 May 2018	School teachers	Swinburne	50
School visit and activity	29 May 2018	School students	Edinburgh College, VIC	19
Monash Tech School student lab tours - Wheelers Hill Secondary College	29 May 2018	School students	Monash	20
UNSW School Visits	4 - 5 June 2018	School students	UNSW	35
Content Planning meeting for Depth Studies UNSW program - David Budden	4 June 2018	School teachers	UNSW	3
Monash Tech School student lab tour - Brentwood Secondary College	5 June 2018	School students	Monash	22
Lab tour	6 June 2018	Research community	UOW	3
Interview for FLEET news release	8 June 2018	Public	Canberra, ACT	
FLEET Launch - outreach activities demonstration	12 June 2018	School students	Monash	30
FLEET Launch	12 June 2018	Public	Monash	100
FLEET Poster Younger Audience	13 June 2018	School students	UNSW	50
John Monash Science School Year 10 Incursion Day - laser activity	15 June 2018	School students	Monash	90
School Presentation	15 June 2018	School students	Lyneham High School, ACT	25
FLEET Geeks Science Show	20 June 2018	School students	Hughesdale Primary School, VIC	80
Monash Work Experience	24 June - 28 June 2018	School students	Monash	9
Preparing videos for news release	5 July - 6 July 2018	Public	UOW	
Lab tour	8 July 2018	Public	Monash	6
Professorial Panel Discussion	11 July 2018	Public	RMIT	40
Regional students Lab Tour	17 July 2018	School students	Monash	6

NAME OF EVENT	DATES	AUDIENCE TYPE	LOCATION	NO. OF AUDIENCE
Monash Tech School student lab tour - Glen Waverley Secondary College	18 July 2018	School students	Monash	20
FLEET Outreach Training Workshop FLEET - UNSW	19 July 2018	Research community	UNSW	15
UQ Physics tour	21 July 2018	School students	UQ	2
Monash Tech School student lab tour - Highvale Secondary College	24 July 2018	School students	Monash	20
Swinburne Open day	29 July 2018	Public	Swinburne	200
UQ Open Day	5 August 2018	School students	UQ	
Monash Open Day	5 August 2018	Public	Monash	2000
Public lecture	5 August 2018	Public	Monash	30
John Monash Science School Regional Exchange - laser activity	8 August 2018	School students	Monash	17
UoW Open Day	11 August 2018	Public	UOW	1500
RMIT Open Day	12 August 2018	School students	RMIT	200
Scienceworks Excursion for Tarneit P-9 College and Tarneit North Kindergarten	16 August 2018	School students	Melbourne, VIC	50
Planning for College activities	19 August 2018	School students	Swinburne	25
The Great Debate	19 August 2018	Public	Sydney, NSW	50
Girls in Physics Breakfast - Monash	21 August 2018	School students	Monash	140
FLEET Geeks Science Show	22 August 2018	School students	Saint Thomas Moore Primary School, VIC	300
ANU Open Day	25 August 2018	School students	ANU	200
Public lecture	28 August 2018	Public	Monash	65
MathsCraft	31 August 2018	School students	Eltham, VIC	50
UNSW Open Day	1 September 2018	Public	UNSW	5000
Scienceworks Levitating Superconductor training	4 September 2018	Other professional organisations and bodies	Melbourne, VIC	
John Monash Science School Regional Exchange	5 September 2018	School students	Monash	12
Editing news release	7 September 2018	Public	ANU	
Python for data visualisation	10 September 2018	Undergraduate students	Zamboanga City, Philippines	20

NAME OF EVENT	DATES	AUDIENCE TYPE	LOCATION	NO. OF AUDIENCE
Conductivity workshop	13 - 14 September 2018	School students	Monash	90
Quantum Hall effect	14 - 28 September 2018	Undergraduate students	UNSW	3
Dr Yimei Zhu (Department of Energy Brookhaven National Laboratory) visit & lab tour	14 September 2018	Government	UNSW	4
Singapore Republic Polytechnic International Visit	17 September 2018	Undergraduate students	UNSW	28
Binary School Visit	20 September 2018	School students	Moriah College, NSW	30
Work Experience Student	21 September - 20 December 2018	School students	Swinburne	1
Science Party	22 September 2018	Public	Hawthorn, VIC	15
Work Experience Student	23 September 2018	School students	Swinburne	1
Science & Technology Australia Members Meetup	25 September 2018	NGOs	Sydney, NSW	20
School of Physics tour	28 September 2018	School students	UNSW	4
Work experience student	3 - 18 October 2018	School students	Swinburne	1
FLEET Outreach Training workshop - Melbourne	4 October 2018	FLEET Members	Melbourne, VIC	
SBS Radio Persian Program	15 October 2018	Public	Melbourne, VIC	
Research expo	16 October 2018	Research community	UNSW	40
Panellist in YouRforum: Got Phd, What Next?	17 October 2018	Undergraduate students	UNSW	25
Outreach lecture	19 October 2018	Undergraduate students	UQ	70
Hosting a year 10 work experience student at Swinburne University	22 - 26 October 2018	School students	Swinburne	1
Work experience student	22 - 26 October 2018	School students	Swinburne	1
School of Physics tour	23 October 2018	School students	UNSW	12
Lab tour for a 10 grade student	23 October 2018	School students	Swinburne	1
Mentoring Year 12 Work Experience Student	23 October 2018	School students	Swinburne	1
John Monash Science School Scanning Tunnelling Microscope Lab Tour	5 November 2018	School students	Monash	22
Research interview - undergraduate students	5 November 2018	Undergraduate students	UNSW	20

NAME OF EVENT	DATES	AUDIENCE TYPE	LOCATION	NO. OF AUDIENCE
Lab tour for school students	6 November 2018	School students	Swinburne	20
The Great Debate	8 November 2018	Public	Melbourne, VIC	80
Australian Institute of Physics (AIP) - Victoria RMIT lab tour and briefing	10 November 2018	Other professional organisations and bodies	RMIT	20
Brisbane Physics in the Pub	10 November 2018	Public	Brisbane, QLD	60
Asia-Oceania Neutron Scattering Association (AONSA) Neutron School 2018	14 - 15 November 2018	Other professional organisations and bodies	Sydney, NSW	35
Lab tour for visiting scholars	15 November 2018	Research community	RMIT	3
Embedding high school Physics teachers within the university system – reflections by a Visiting Teaching Fellow	20 November 2018	Research community	UNSW	
Science Teachers' Association of Queensland (STAQ) Senior Science Day	20 November 2018	School teachers	Brisbane, QLD	40
Co-writing a blog article for FLEET on negative mass	26 November 2018	Public	Brisbane, QLD	
Fleet annual workshop - Coach captain	2 December 2018	Research community	Sydney, NSW	10
FLEET Annual Workshop - Photography	4 December 2018	Research community	Magenta, NSW	150
Volunteering at ICON-2DMAT conference	11 - 13 December 2018	Other professional organisations and bodies	Melbourne, VIC	
School of Physics Tour Penrith Selective High	14 December 2018	School students	UNSW	55
Queensland Curriculum Assessment Authority: Reviewing year 12 physics assessment	17 - 19 December 2018	Government	Brisbane, QLD	
DOS Lecture Series	17 December 2018	Undergraduate students	Manila, Philippines	10
Lab tour for year 10 students	23 May 2018	School students	Swinburne	

ACTIVITY	WHAT YOU WILL LEARN	SEE HOW IT'S DONE
Appearing coin	Use the science of refraction to make a coin suddenly appear.	fleet.org.au/blog/appearing-coin
Balancing see-saw	Use household items to demonstrate the science behind see-saws.	fleet.org.au/blog/balancing-see-saw
Balloon vs fire	If you hold a flame to a balloon, can you prevent it from exploding?	fleet.org.au/blog/balloon-vs-fire
Bird in a cage illusion	Create a visual illusion where a bird and a cage drawn different side of the paper to appear as though the bird is in the cage.	fleet.org.au/blog/bird-illusion
Boat racers	Use bread bag ties to create boats that race along the surface of water without even touching them.	fleet.org.au/blog/boat-racers
Boiling ice	A simple experiment to demonstrate thermodynamics!	fleet.org.au/blog/boiling-ice
Card trick	Using maths, perform a card trick to fool friends and family.	fleet.org.au/blog/card-trick
Catapult	Make a really simple catapult that can be used to fire small items across rooms!	fleet.org.au/blog/catapult
Catching bubbles	Playing with bubbles can be a bit of fun. But what if you could make it so that the bubbles didn't pop when you caught them?	fleet.org.au/blog/catching-bubbles
Coin shooter	Create a tower using coins, and then bring your tower down by shooting out one layer at a time.	fleet.org.au/blog/coin-shooter
Coke vs diet coke	If you have a can of Coke and Diet Coke, they are the same size – it says so right on the cans. But we observe a difference very easily.	fleet.org.au/blog/coke-vs-diet-coke
Coloured light	What colour do you get when you combine red, green and blue light?	fleet.org.au/blog/coloured-light
Coloured words	This week we use a bit of psychology to issue a challenge – can you say the colour of the text, rather than reading the word?	fleet.org.au/blog/coloured-words
Cup bridge	Three of the cups are in a triangle, too far apart for the knives to reach. You need to build a bridge to support the weight of the fourth cup.	fleet.org.au/blog/cup-bridge
Day and night	Demonstrate why we experience day and night using a ball and a lamp.	fleet.org.au/blog/day-and-night
Dissolving M&Ms	If you have a few spare M&M's that you'd rather experiment with than eat, this is the experiment for you.	fleet.org.au/blog/dissolving-mms
Double bounce	Use a basketball and a tennis ball to examine transfer of energy.	fleet.org.au/blog/double-bounce
Electrified steel wool	Use nothing but a 9V battery to set steel wool on fire!	fleet.org.au/blog/electrified-steel-wool
Elephant toothpaste	Create a chemical reaction that looks like very, very large toothpaste!	fleet.org.au/blog/elephant-toothpaste
Falling blocks	This demo is a model of a toy, Jacob's ladder, that presents as a type of illusion.	fleet.org.au/blog/falling-blocks
Falling objects	If you drop objects that weigh different amounts, which will hit the ground first?	fleet.org.au/blog/falling-objects
Falling rings	Create something out of keyrings that appears to be a magic trick.	fleet.org.au/blog/falling-rings
Fingerprinting	Examine your fingerprints using every day items. What shapes can you see in your fingerprints?	fleet.org.au/blog/fingerprinting
Floating on air	A simple but magical experiment using a ping pong ball and a hair dryer.	fleet.org.au/blog/floating-on-air

ACTIVITY	WHAT YOU WILL LEARN	SEE HOW IT'S DONE
Holey bag	A bit of science magic – why doesn't a holey bag leak?	fleet.org.au/blog/holey-bag
Holey balloon	A little bit of science magic. What happens when you push a skewer all the way through a balloon? It pops, right? Not necessarily.	fleet.org.au/blog/holey-balloon
Honeycomb	Some kitchen science with a tasty treat at the end!	fleet.org.au/blog/honeycomb
Hovering grape	Create some science magic with a grape hovering in the middle of a glass of water.	fleet.org.au/blog/hovering-grape
Kitchen extinguisher	Try putting out a candle by making your own fire extinguisher using things you find in the kitchen.	fleet.org.au/blog/kitchen-extinguisher
Magic floating cutlery	Balance a fork and a spoon on the edge of a toothpick, with the other end of the toothpick just touching the rim of a glass.	fleet.org.au/blog/floating-cutlery
Marker Pen Chromatogra- phy	Examine what makes up some colours in coloured markers.	fleet.org.au/blog/chromatography
Mobius strip	Create an object that only has one side - known as a Möbius strip.	fleet.org.au/blog/mobius-strip
Musical glasses	Make some music with glasses of water and a spoon. What are the different sounds you can make?	fleet.org.au/blog/musical-glasses
Phases of the moon	Use household items to visualise and explain why we see the moon as different shapes.	fleet.org.au/blog/phases-of-the-moon
Punching corn flour	Is it a liquid? Is it a solid? It is possible for it to be both?	fleet.org.au/blog/punching-corn-flour
Red cabbage indiator	Something colourful with kitchen items that can be used to show how acidic (or basic) something is.	fleet.org.au/blog/red-cabbage-indi- cator
Rope climber	Use craft and a bit of science to create a puppet that can climb a rope.	fleet.org.au/blog/rope-climber
Rubberband car	Use household materials to create a car that can actually go.	fleet.org.au/blog/rubberband-car
Shrinking chip packet	Make a miniature version of a chip packet. You could make this into a keyring to hang on a school bag.	fleet.org.au/blog/shrinking-chip-pack- et
Sinking oranges	Did you know that whether something floats is not about how much it weighs. We can investigate this using oranges.	fleet.org.au/blog/sinking-oranges
Siphon	Create a siphon using two glasses of water and a tube, and watch as the water defies gravity.	fleet.org.au/blog/siphon
Spinning eggs	Did you know that a boiled egg will spin around and around, but if you try it with a raw egg it will just stop? Try it!	fleet.org.au/blog/spinning-eggs
Spinning wire	The spinning wire experiment is actually an experiment that creates a simple motor with the use of just three things.	fleet.org.au/blog/spinning-wire
Strength challenge	How strong do you think you are? Here is a trick you can do to show people how "strong" you are.	fleet.org.au/blog/strength-challenge
Supertaster	Test (and trick) your tastebuds, looking at the relationship between taste and smell.	fleet.org.au/blog/supertaster
Walking colours	Use science (and a bit of food colouring) to make a beautiful rainbow by "walking" colours between glasses.	fleet.org.au/blog/walking-colours
Water bender	You can be a water bender. All you need is a balloon (and a good head of hair).	fleet.org.au/blog/water-bender

A31 FLEET 2018 ANNUAL REPORT APPENDICES

DATE	ARTICLE TITLE	MEMBERS MENTIONED / INVOLVED	PUBLISHER	LINK TO ARTICLE
24 February 2018	Physicists invent flux capacitor, break time-reversal symmetry	Jared Cole	FLEET	
15 May 2018	Van der Waals material shows the right stuff at 200 nanometres	Lan Wang	Phys.org	bit.ly/2HROFBw
12 June 2018	ARC Centre of Excellence building the future of electronics	Michael Fuhrer	Australian Research Council	bit.ly/2MJzHfF
12 June 2018	New Australian research centre applying 2D materials to computational energy issue	Michael Fuhrer	Eurekalert	bit.ly/2DOhFWD
12 July 2018	Science fiction becomes science fact as researchers create liquid metal heartbeat	Xiaolin Wang	University of Wollongong	bit.ly/2MHfpTZ
18 July 2018	Puzzling results explained: A multiband approach to Coulomb drag and indirect excitons	Alex Hamilton	Eurekalert	bit.ly/2t80N7f
10 August 2018	Atomic-scale material engineering, inspired by nature	Agustin Schiffrin	Nature	go.nature.com/2BdrdbY
6 September 2018	Pushing 'print' on large-scale piezoelectric materials	Torben Daeneke, Kourosh Kalantar-zadeh	Scimex	bit.ly/2BdscsG
6 September 2018	Pushing 'print' on large-scale piezoelectric materials	Agustin Schiffrin, Torben Daeneke	Australian Research Council	
18 September 2018	Quantum anomaly breaking a classical symmetry with ultracold atoms	Chris Vale	Eurekalert	bit.ly/2Wy7pZX
19 September 2018	Quantum anomaly - breaking a classical symmetry with ultracold atoms	Chris Vale	Scimex	bit.ly/2BghjpU
20 September 2018	Quick and not-so-dirty: A rapid nano-filter for clean water	Ali Zavabeti, Kourosh Kalantar-zadeh	Eurekalert	bit.ly/2HKKK9h
24 September 2018	Liquid metal discovery to make toxic water safe and drinkable	Kourosh Kalantar-zadeh, Ali Zavabeti	UNSW	bit.ly/2UsAWSM
5 October 2018	Nobel-winning science is key to Australian research: ultra-fast laser physics	Jeff Davis, Agustin Schiffrin	Scimex	bit.ly/2CZCj4x
24 October 2018	Researchers discover directional and long-lived nanolight in a 2D material	Qiaoliang Bao	Eurekalert	2: Monash University, Eureka Alert

DATE	ARTICLE TITLE	MEMBERS MENTIONED / INVOLVED	PUBLISHER	LINK TO ARTICLE
15 November 2018	Exciting liquid metals provide many solutions	Kourosh Kalantar-zadeh	UNSW	bit.ly/2G2AtUr
10 December 2018	Topological material switched off and on for the first time	Mark Edmonds, Michael Fuhrer, James Collins	Eurekalert	bit.ly/2Uz6gzE
11 December 2018	Ultra-low energy devices at the flick of a switch	Mark Edmonds, Michael Fuhrer, James Collins	Monash University	bit.ly/2Touoob
12 December 2018	Monash physicists discover critical new development with major implications for topological transistors	Michael Fuhrer, Mark Edmonds, James Collins	Monash University	bit.ly/2sZbrgc
18 December 2018	Producing electronics of future	Nikhil Medhekar, Hanqing Yin	National Computing Infrastructure Annual Reports	bit.ly/2GdcLnD

DATE	TYPE	ARTICLE TITLE	MEMBERS INVOLVED	PUBLISHER	LINKS TO FULL ARTICLES
14 February 2018	Print, Magazine	Topology shapes a search for New materials	James Collins, Ali Yazdani	ACS Central Science	bit.ly/2SoUZVa
6 April 2018	Print, Magazine	Electronically smooth '3D graphene': A bright future	Michael Fuhrer, Mark Ed- monds, James Collins	Australian Manufacturing Technology magazine	bit.ly/2UuGxbj
25 September 2018	Print, Magazine	Quantum pancake reveals clues to better electronics	Chris Vale	Cosmos Magazine	bit.ly/2Sm94T2
29 October 2018	Print, Magazine	Squeezing light a bright idea		Cosmos Magazine	bit.ly/2HIISyZ
12 July 2018	Television	News mention: Liquid-metal heartbeat research at UOW	Xiaolin Wang	Nine News	
12 July 2018	Television	News mention: Liquid-metal heartbeat research at UOW	Xiaolin Wang	WIN TV Wollongong	

DATE	TYPE	ARTICLE TITLE	MEMBERS INVOLVED	PUBLISHER	LINKS TO FULL ARTICLES
12 January 2018	Radio	Radio interview	Michael Fuhrer	ABC Radio 2CC Canberra	2cc.net.au/
9 February 2018	Radio	Radio interview with Radio Adelaide's science show, Subatomic	Torben Daeneke	Radio Adelaide 101.5	bit.ly/2WB7YSX
11 February 2018	Radio	Radio interview: ultracold atomic physics	Carlos Claiton Noschang Kuhn	3RRR	bit.ly/2UA25DD
6 May 2018	Radio	Radio Interview: Liquid metal	Rebecca Orrell-Trigg	Radio RRR Einstein a Go-Go	rrr.org.au/program/einstein-a-go- go
20 May 2018	Radio	Agustin Schiffrin: atomic-scale materials engineering	Agustin Schiffrin	Triple R Station	bit.ly/2MHfk2D
12 June 2018	Radio	News mention: Research Centre Launch	Michael Fuhrer	ABC Radio	
12 July 2018	Radio	ABC radio interview: Liquid-metal heartbeat	David Cortie	ABC Illawarra Radio	
12 July 2018	Radio	News mention: Liquid-metal heartbeat research at UOW	UoW researchers	Triple J Radio	
12 July 2018	Radio	News mention: Liquid-metal heartbeat research at UOW	UoW researchers	Multiple mentions on ABC radio stations	20: Alice Springs, 1233 New-castle, Upper Hunter AM, West Coast SA AM, North and West SA, South East SA, Broken Hill AM, Riverland AM, Northern Tasmania, South West WA, 720 Perth, Goldfields, Esperance, North West WA, Great Southern WA, Mid West and Wheatbelt AM, Kimberley, NewsRadio, Northern Tasmania

DATE	ARTICLE TITLE	MEMBERS MENTIONED / INVOLVED	PUBLISHER	DETAILS
1 March 2018	Topological material matching graphene for electronic smoothness is key to future low-energy electronics	Errol Hunt, Michael Fuhrer, Mark Edmonds, James Collins	Australian Physics	
10 August 2018	Atomic-scale material engineering, inspired by nature	Agustin Schiffrin	Chemistry Community, Nature	go.nature.com/2M- HMajL
1 October 2018	Measuring thickness-dependent electronic properties & the 2D-3D transition	Errol Hunt, Xiaolin Wang, Feixiang Xiang	Association of Asia Pacific Physical Societies Bulletin	bit.ly/2Rg78rf
1 October 2018	Pushing 'print' on large-scale piezoelectric materials	Kourosh Kalantar-zadeh, Torben Daeneke	Australian Manufacturing Technology magazine	bit.ly/2FYcyoY
28 November 2018	Computing faces an energy crunch unless new technologies are found	Jared Cole, Daisy Qingwen Wang	The Conversation	bit.ly/2HJ51Mz
13 December 2018	Superconducting circuits: designing quantum computers and flux capacitors	Jared Cole	Australian Institute of Physics	

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
8 January 2018	Trisodium bismuthide is an effective conductive material	Michael Fuhrer	Spinoff	spinoff.com/na3bi
12 March 2018	Australian Fulbright Awardees for 2017–2018	Harley Scammell	Australian-American Ful- bright Commission	fulbright.org.au/cur- rent-scholars
19 March 2018	Two-dimensional materials key to solving computing energy challenge	Alex Hamilton, Jan Seidel, Nagarajan Valanoor, Dimi Culcer, Oleg Sushkov, Oleh Klochan	UNSW Science	bit.ly/2CVpYOG
23 March 2018	Switching conduction mode—a step towards topological transistors	Michael Fuhrer, Mark Edmonds, Shaffique Adam	Phys.org	bit.ly/2CVq7Se
26 March 2018	Switching conduction mode: a step towards topological transistors	Michael Fuhrer, Mark Edmonds, Shaffique Adam	Monash University	bit.ly/2TocOk9
5 April 2018	Interactions within quantum batteries are key to their charge advantage	Meera Parish, Jesper Levinsen	Phys.org	bit.ly/2S02hPz
5 May 2018	Improved understanding of ground-breaking liquid-metal 2D technique	Paul Atkin	Phys.org	bit.ly/2TvknG5
15 May 2018	RMIT researchers find the first material candidate for vdW heterostructures-based spintronics	Lan Wang, Cheng Tan	Spintronics-Info	bit.ly/2G6aZFR
21 May 2018	Thinning down for enhanced magnetic properties	Lan Wang, Cheng Tan	Materials Today	bit.ly/2DM6cH8
28 May 2018	Back to the future as researchers invent real-life flux capacitor	Jared Cole	RMIT University	bit.ly/2G1T1UI
28 May 2018	Physicists invent flux capacitor to break time-reversal symmetry	Jared Cole	Multiple sites	4: University of Queens- land, Phys.org, Science Bulletin, World Issues
28 May 2018	Scientists invented a real-life flux capacitor, but not for time travel		Engadget	engt.co/2DOvSmp
11 June 2018	Current without resistance		Multiple sites	3: Vertatique Green ICT: Sustainable Computing, Media, e-Devices
11 June 2018	Low energy electronics in centre's sights		Newstage	bit.ly/2Sgw9Xs
12 June 2018	ARC Centre of Excellence building the future of electronics	Michael Fuhrer	Get STEM	bit.ly/2HHks2s
12 June 2018	Low energy electronics in centre's sights	Michael Fuhrer	SBS	bit.ly/2sZ7Pec
13 June 2018	Real power struggle for CIOs is electricity, warns Monash University	Michael Fuhrer	Information Technology News	bit.ly/2MHqmF7

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
14 June 2018	ARC centre to tackle the growing energy costs of computing	Michael Fuhrer	Multiple sites	3: Electronics online, Sustainability Matters, Open Gov Asia
14 June 2018	New low energy technologies smart answer to future computing crisis	Matthew Davis	University of Queensland	bit.ly/2DNIBHa
14 June 2018	Swinburne researchers contribute to newly launched FLEET Centre	Chris Vale, Jeff Davis	Swinburne University of Technology	bit.ly/2WAyaN9
15 June 2018	Launch: Centre of Excellence in Future Low-Energy Electronics Technologies	Daisy Qingwen Wang, Alex Hamilton, Michael Fuhrer	University of New South Wales	bit.ly/2CVunkF
20 June 2018	Australia welcomes new research centre for low-energy electronics technologies	Michael Fuhrer	OpenGov Asia	bit.ly/2DMeiiO
21 June 2018	FLEET Official Launch	Michael Fuhrer	Monash University Science	bit.ly/2TqOOwT
11 July 2018	Science fiction becomes science fact as researchers create liquid metal heartbeat	Xiaolin Wang, David Cortie	Multiple sites	8: Phys.org, Vertatique Green ICT: Sustaina- ble Computing, Media, e-Devices , Newstage, Graphene-info, The Surg, Engadget, Australian Research Council
19 July 2018	Puzzling results explained - a multiband approach to Coulomb drag and indirect excitons	Alex Hamilton	Multiple sites	3: Nanowek, Phys.org and Science Daily
19 July 2018	Puzzling results explained: a multiband approach to Coulomb drag and indirect excitons in dual-layer graphene		Graphene-info	bit.ly/2WxBets
1 August 2018	Problem in exciton-polariton physics resolved using novel method	Guangyao Li, Elena Ostrovskaya, Eliezer Estrecho	Phys.org	bit.ly/2GeYhDF
1 August 2018	Why 2D? Measuring thickness-dependent electronic properties	Feixiang Xiang, Xiaolin Wang, Alex Hamilton	Phys.org	bit.ly/2CZE817
10 August 2018	New materials inspired by nature could be key to future electronics	Agustin Schiffrin	Multiple sites	3: Monash University
13 August 2018	Self-assembled nanostructures with atomically precise structure and tailored electronic properties	Agustin Schiffrin	Phys.org	bit.ly/2Ge9kNs
15 August 2018	Hole-based artificial atoms could be key to spin-based qubit	Alex Hamilton	Phys.org	bit.ly/2RXZbLU
16 August 2018	Controlling hole spin for future quantum spin-based devices, topological materials	Alex Hamilton	Phys.org	bit.ly/2RZgmga

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
24 August 2018	Two ARC Centres of Excellence combine forces to create 'flux capacitor'		Australian Research Council	arc.gov.au/research-high- lights
6 September 2018	First ever large-scale 2D surface deposition of piezoelectric material	Kourosh Kalantar-zadeh, Torben Daeneke	Nanowerk	bit.ly/2S2ReFc
6 September 2018	Printing two-dimensional gallium phosphate out of liquid metal	Kourosh Kalantar-zadeh, Torben Daeneke, Jian-zhen Ou, Benjamin Carey	X Mol	x-mol.com/paper/805792
6 September 2018	Pushing 'Print' on Large-Scale Piezoelectric Materials	Kourosh Kalantar-zadeh, Torben Daeneke	Multiple sites	5: Science Springs, ECN Magazine, R&D Maga- zine, Science Daily, Tech- nology Breaking News
7 September 2018	"First ever" large-scale 2D surface deposition of piezoelectric material	Kourosh Kalantar-zadeh	Multiple sites	2: New Electronics, World Industrial Reporter
12 September 2018	Scientists found a better, cheaper and more energy efficient way to make accelerometers	Kourosh Kalantar-zadeh	Technology Org	bit.ly/2D0EDrl
19 September 2018	Quantum anomaly: Breaking a classical symmetry with ultracold atoms	Chris Vale	Multiple sites	2: Phys.org, Science Daily
20 September 2018	New nano-filter cleans water 100 times faster	Ali Zavabeti	Multiple sites	8: Can India, Prokerala, New Indian Express, Business Standard, Daiji World, The Business Standard, Yahoo News, The Pioneer
21 September 2018	New nano-filter cleans water 100 times faster Aussie scientists	Ali Zavabeti	Xinhua Press Agency	2: Xinhua Press Agency and China.org.cn
21 September 2018	Rapid nano-filter cleans dirty water 100 times faster	Ali Zavabeti	World Industrial Reporter	bit.ly/2Todzda
21 September 2018	Scientists develop nano-filter that cleans water 100 Times faster	Ali Zavabeti	Multiple sites	5: NDTV News, Gadgets 360, Sortiwa Breaking News Headlines, Irrigation Australia, ZME Science
21 September 2018	This nano-filter cleans water 100 times faster, claim scientists	Ali Zavabeti	Gadgets Now	bit.ly/2sYgz4b

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
25 September 2018	Australian nanofilter promises rapid access to clean water	Ali Zavabeti, Kourosh Kalantar-zadeh	Multiple sites	19: Aus.remonews.com, The Engineer UK, Engi- neers Australia, FARS News agency, Science Daily, Engineering.com, MEDIndia, Microscopy & Analysis, NTV, Sustain- ability Matters, Materials Today, Rinnovabili.it, Nanowerk, Space Daily, Water Online, Materials Gate, Chem Europe, Water & Sewage Technology, Materials World
25 September 2018	Nano-filter built by researchers that cleans water 100x faster	Ali Zavabeti	Chemical News 24	bit.ly/2RZY2Dv
25 September 2018	Pushing 'print' on large-scale piezoelectric materials	Kourosh Kalantar-zadeh	Multiple sites	4: Materials Today, Space Daily, Academia: Elec- tronics For You, Australian Research Council
26 September 2018	Liquid metal discovery to make toxic water safe and drinkable	Ali Zavabeti	Environmental News Network	bit.ly/2ShMECs
26 September 2018	Researchers develop cheap, easy to produce nano-filter to scrub toxic metals from polluted water	Ali Zavabeti	Sign of the Times	bit.ly/2TqfBt4
1 October 2018	FLEET collaboration aims to prevent energy losing its way	Meera Parish, Michael Fuhrer	Multiple sites	3: Monash Lens and Monash Science
3 October 2018	Quantum pancake reveals clues to better electronics	Chris Vale	Australian Institute of Physics	bit.ly/2DMQ3RI
4 October 2018	Nobel-winning science is key to Australian ultra-fast laser physics research	Jeff Davis	Swinburne University of Technology	bit.ly/2S2eDGP
5 October 2018	Nobel prize celebrates ultra-fast laser physics	Agustin Schiffrin	Monash Science	bit.ly/2G0PYft
8 October 2018	Liquid metal discovery to make toxic water safe and drinkable	Kourosh Kalantar-zadeh, Ali Zavabeti	Multiple sites	9: Substance: ETS, UNSW, Longroom, CLHS Sciblog, Berenjenosky, Phys.org, RMIT, Technol- ogy Networks, Bild der Wissenschaft

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
16 October 2018	First year physics students exploring future electronics	Alex Hamilton, Karina Hudson	UNSW Science	bit.ly/2GcU97o
22 October 2018	Materialise: a science quest	Michael Fuhrer	MacDiarmid Institute	macdiarmid.ac.nz/materi- alise-a-science-quest/
23 October 2018	Computers have grown into energy gluttons, and it can't go on like this	Michael Fuhrer	The Spinoff	bit.ly/2MLGsNH
23 October 2018	How homegrown tech can help make our future greener	Michael Fuhrer	NewstalkZB	bit.ly/2HKtlxL
25 October 2018	Physics breakthrough to improve energy efficiency	Qiaoliang Bao, Errol Hunt	Multiple sites	3: Sustainability Matters, Energy Source & Distribu- tion, Bright Stuff
25 October 2018	Researchers discover directional and long-lived nanolight in a 2D material	Qiaoliang Bao	Multiple sites	9: Xinhua Press Agency, Sustainability Matters, Monash University Engi- neering Faculty, TEKK, Monash University En- gineering News, Energy Source and Distribution, Phys.org, CIC nano- GUNE, Brightsurf
25 October 2018	Researchers invented cheap filters making contaminated water drinkable		The Surg	bit.ly/2SoXkPW
6 November 2018	Professor Kalantar-zadeh's part in 'squeezed light' breakthrough	Kourosh Kalantar-zadeh, Qiaoliang Bao	UNSW Engineering	bit.ly/2RrHpf7
15 November 2018	Kilogram is about to change. Here's what you need to know.	Jared Cole	Buzzfeed	bzfd.it/2D1ElkJ
27 November 2018	Monash researchers recognised for international Influence in the 2018 highly cited researchers list	Michael Fuhrer, Qiaoliang Bao	Monash University	bit.ly/2BfxlQU
27 November 2018	Professor michael fuhrer recognised for international influence in the 2018 highly cited researchers list	Michael Fuhrer	Monash University Science	bit.ly/2CVrKzk
28 November 2018	Clarifying effects of negative mass	David Colas	Phys.org	bit.ly/2RZYgKR

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
28 November 2018	Computing faces an energy crunch unless new technologies are found	Jared Cole, Daisy Qingwen Wang	Multiple sites	10: Phys.org, Ranga Consulting, Property Observer, GCN Technol- ogy, Stuff, Australasian Science, Viw Magazine, Australia Science TV, UNSW Newsroom, Life- hacker
28 November 2018	UNSW rises to fourth among GO8 in list of world's most influential scientists	Kourosh Kalantar-zadeh	UNSW	bit.ly/2Rtfag4
1 December 2018	UNSW secures \$13.5 million in latest ARC funding	Kourosh Kalantar-zadeh	Inside UNSW	bit.ly/2S314am
10 December 2018	Room temperature switching in ultrathin material could lead to topological transistors	James Collins	Cooling Zone	bit.ly/2MHNfYR
10 December 2018	Topological matters: toward a new kind of transistor	James Collins, Michael Fuhrer, Mark Edmonds	Multiple sites	15: Lightsources.org, Science Daily, Science Springs, Melbourne Press Club, Monash University Faculty of Science, Engi- neering Inspiration: UCL, Materials Today, Phys. org, MyScience, STRN: Science and Technology Research News, Electron- ics Online, Science Daily, Materials Today, TEKK
11 December 2018	El transistor FET topológico gracias al «grafeno 3D»	Mark Edmonds, Anton Tadich, James Collins	Naukas	bit.ly/2MJT3RI
11 December 2018	Progress on low energy electronics	Anton Tadich	ANSTO	bit.ly/2SnOLoa
12 December 2018	Computers could soon run cold, no heat generated	Mark Edmonds	Network World	bit.ly/2GfFsAc
12 December 2018	Topological material switched off and on for the first time	Michael Fuhrer, Mark Edmonds	Multiple sites	8: FARS News Agency, Computer World, Newsz Base, Evaluation Engi- neering, ScienceMag, Solid State Technology, EIN, Monash University

DATE	ARTICLE TITLE	CENTRE MEMBERS MEN- TIONED / INVOLVED	PUBLISHER	DETAILS
12 December 2018	Topological matters: toward a new kind of transistor	Mark Edmonds	Multiple sites	3: ECN magazine, Physics World, Australian Research Council
12 December 2018	Topological matters: toward a new kind of transistor	Mark Edmonds, James Collins, Michael Fuhrer	Multiple sites	8: Science Bulletin, Long- room, ScienceMag, Inno- vations Report, Newswise , Nanowerk, Berkeley Lab, Mirage News
13 December 2018	Scientists design ingestible electronic pill that can be controlled wirelessly	Kourosh Kalantar-zadeh	Tech Digest	bit.ly/2S2Qa4a
18 December 2018	First snapshot of exciton-polariton condensation process	Eliezer Estrecho, Elena Ostrovskaya	Phys.org	bit.ly/2RvogZs
18 December 2018	Ultra low energy devices possible with the flick of a switch	James Collins, Michael Fuhrer, Mark Edmonds	New Electronics	bit.ly/2ShOi6X
20 December 2018	New study throws switch on topological transistors	Mark Edmonds	Elsevier Material Science News	bit.ly/2BdrqvM