

FLEET2022 ANNUAL WORKSHOP PROGRAM

@FLEETcentre | #FLEET2022

MONDAY 4 JULY		Chair: Kourosch Kalantar-Zadeh
12:00	Lunch: hot buffet	
13:00	Welcome: Alex Hamilton	
13:20	Operations: Tich-Lam Nguyen	
13:30	Research theme 2 overview: Elena Ostrovskaya	
14:00	Rydberg exciton-polaritons in a magnetic field: Emma Laird	
14:20	Superradiant excitons in organic 2D monolayers: Yuerui Lu	
14:40	Towards creating spatially indirect excitons in bilayer graphene van der Waals heterostructures: Feixiang Xiang	
15:00	Tea break: Chef's selection of cakes	

		Chair: Jeffrey Davis
15:45	Observation of room temperature excitons in an atomically thin topological insulator: Marcin Syperek	
16:15	Interplay between polarization and quantum correlations of confined polaritons: Olivier Bleu	
16:35	Exciton-polariton interactions in monolayer WS_2 : Jack Muir	
16:55	P-type Ohmic contact to monolayer WSe_2 , field-effect transistors using high electron affinity MoO_3 : Yi-Hsun Chen	
17:30	Tour of UOW FLEET node Science space show Free time	
19:00	Dinner: Mediterranean BBQ buffet	

TUESDAY 5 JULY		Chair: Matthew Davis
9:00	Research theme 3 overview: Kris Helmerson	
9:20	Advances in attosecond metrology: Matt Weidman	
9:50	Determination of static and dynamic complex optical properties using THz-TDS: Gary Beane	
10:10	Arbitrary Phase Control of Ground-Exciton State Coherence in Monolayer WS_2 : Mitch Conway	
10:30	Tea break: Chef's selection of bakery items	

		Chair: Chris Vate
11:15	Strongly-correlated electron-photon systems: Victor Galitski	
11:45	Dynamics in Fermi gases quenched to unitarity: Paul Dyke	
12:05	Vortices in bubble shaped BECs: Angela White	
12:25	Microscopic derivation of Hubbard parameters from quantum gas microscopes: Haydn Adlong	
12:45	Lunch: Gourmet sandwiches & wraps	
13:00	Tour of ANSTO 1-5 PM Tour of UOW FLEET node 2-5 PM Science Space show 2-5 PM Free time	
14:00	FLEET Translation Program - Ask me anything: Michael Harvey	
17:30	Poster presentations: canapes and drinks	
19:00	Dinner: hot buffet	

WEDNESDAY 6 JULY		Chair: Jackson Smith
9:00	Research themes 1AB: Alex Hamilton, Xiaolin Wang, Lan Wang	
9:35	Some theoretical results for twisted bilayer graphene near magic angle: Shaffique Adam	
9:55	Theory of exciton condensation in biased bilayer graphene: Harley Scammel	
10:15	FLEET Translation Program Michael Harvey	
10:30	Tea break: House-made cookies and muesli bars	

		Chairs: Simon Granville
11:15	Tuning the electronic and optical properties of phosphorene: straining, stacking and twisting: Francois Peeters	
11:45	Progress towards artificial graphene: Daisy Wang	
12:05	Correlation-induced magnetism in substrated-supported 2D metal-organic frameworks: Bernard Field	
12:25	Education & Training committee: Sue Coppersmith	
12:40	Lunch FLEET Executive committee June meeting	

WEDNESDAY 6 JULY		Chair: Golrokh Akhgar
14:00	Quantum materials for FLEET technologies: A neutron scattering perspective: Kirily Rule	
14:30	Spatial control over the Z2 invariant and surface conductivity of a strong 3D topological insulator: David Cortie	
14:50	Liquid metal (LM) and LM alloy reaction platforms for the growth of 2D metal oxides: Tin-facilitated growth of 2D Manganese-based oxides: Abigail Goff	
15:10	Outreach committee: Nikhil Medhekar	
15:25	Tea break: fruit platter yoghurt	

		Chair: Shaffique Adam
16:10	DFT Modelling of multiferroic In_2Se_3/Fe_3GeTe_2 and other van der Waals heterostructures: Michelle Spencer	
16:40	Electronic properties of the charge density wave material $1T-TiSe_2$: Joshua Gray	
17:00	Nonlinear responses of topological materials: Dimi Culcer	
15:20	Equity & Diversity committee: Jeff Davis	
17:35	Poster presentations: canapes and drinks	
18:45	Group photo	
19:00	Conference Dinner - 3 course formal menu	

THURSDAY 7 JULY		Chair: Dongchen Qi
9:00	Non-invasive neural interfaces with epitaxial graphene: Francesca Iacopi	
9:30	Phonon-polariton propagation in hBN and MoO_3 - effect of boundaries: Jiong Yang	
9:50	2D oxide from liquid eutectic mixture: Patjaree Aukarasereenont	
10:10	Plasmonic and dielectric nanoantennas coupled to 2D materials: Stefan Maier	
10:20	Communications committee: Karina Hudson	
10:35	Tea break: Chef's selection of bakery items	

		Chair: Jan Seidel
11:20	Quantum transport in topological nanoribbon with disorders: Hong Liu	
11:40	Investigation of bulk-edge interaction and spin-filtered transport in two-dimensional planar bismuthene: Yuefeng Yin	
12:00	Influence of device geometry and imperfections on the interpretation of transverse magnetic focusing experiments: Yik Kheng Lee	
12:20	Industry Relations committee: Torben Daeneke	
12:35	Closing and Awards: Michael Fuhrer	
12:50	Lunch break: hot buffet	
14:00	Buses to UNSW and Sydney Airport Tour of UOW FLEET node 17:45	

		Chair: Tich-Lam Nguyen
13:45	veski kickstart: Personal brand development & CV writing	
15:00	Tea break: Chefs selection of sweet and savoury	
15:15	veski kickstart panel discussion: Changing directions - understanding and positioning your skills	
15:45	veski kickstart: The strategic job search & networking	
16:30	veski kickstart: Rotated networking with industry leaders	
19:00	Dinner: Mexican buffet	

FRIDAY 8 JULY		Dan Sando, Abby Goff & Abhay Gupta
9:00	Does science have to be serious? ECR working group	
10:30	Tea break: Chefs selection of bakery items	
11:00	Academia and beyond - science careers Q & A panel discussion: ECR working group	
12:30	Lunch: Live BBQ	
14:00	Buses to UNSW and Sydney Airport	



FLEET

ARC CENTRE OF EXCELLENCE IN
FUTURE LOW-ENERGY
ELECTRONICS TECHNOLOGIES