



FLEET

ARC CENTRE OF EXCELLENCE IN
FUTURE LOW-ENERGY
ELECTRONICS TECHNOLOGIES

FLEET INTRODUCTION WORKSHOP

6 FEB 2017 - 8 FEB 2017

CROWNE PLAZA SURFERS PARADISE

AGENDA

Monday, 6 February 2017

8:00	Arrival Coffee & Setting Up Prefunction Area and Phoenix Room - First Mezzanine Floor Main Tower Phoenix Room
8:30	Welcome & Overview Michael Fuhrer
8:50	Topological Dirac semimetals as a route to a topological transistor Michael Fuhrer
9:25	GaAs and artificial graphene Alex Hamilton
10:00	Break Prefunction Area Phoenix Room
10:45	In Silico Materials Design: Investigating structure and fundamental properties via advanced computing Nikhil Medhekar
11:20	The FLEET Sandwich- Designing complex oxides heterostructures for FLEET Nagarajan Valanoor
11:55	Exciton-polariton condensation and superfluidity: from cryogenic to room temperatures Elena Ostrovskaya
12:30	Lunch Relish Restaurant Phoenix Room
13:45	Quantum transport in topological insulators Lan Wang
14:20	Ultracold 2D gases of Fermi atoms for FLEET Chris Vale
14:55	Punching holes in GaAs: a novel route to making artificial graphene and topological insulators Oleh Kochlan
15:30	Break Prefunction Area Phoenix Room
16:15	Driven Bose gas experiments Kris Helmerson
16:50	Ultrafast Spectroscopy and Floquet Topological Insulators in 2D Materials Jeff Davis
17:25	Nonequilibrium superfluids Matthew Davis
18:30	END OF DAY 1 - COCKTAIL FUNCTION Prefunction Area



FLEET

ARC CENTRE OF EXCELLENCE IN
FUTURE LOW-ENERGY
ELECTRONICS TECHNOLOGIES

FLEET INTRODUCTION WORKSHOP

6 FEB 2017 - 8 FEB 2017

CROWNE PLAZA SURFERS PARADISE

AGENDA	Tuesday, 7 February 2017
8:00	Coffee Prefunction Area Phoenix Room
8:30	Correlations in and out of equilibrium: From Cold Atoms to Electrons Meera Parish
9:05	The theory of topological insulators Dimi Culcer
9:40	Scanning Probe Microscopy of Nanoscale Functional Materials Jan Seidel
10:15	Break Prefunction Area Phoenix Room
11:00	Two dimensional materials work at RMIT Kourosh Kalantar-zadeh
11:35	Surface Nano-Physics at Monash: Atomically Engineered Materials for Nano- and Opto-Electronics Agustin Schiffrin
12:10	Modelling electronic transport in nanostructures: lessons from superconductors and semiconductors Jared Cole
12:45	Lunch Relish Restaurant Phoenix Room
14:00	Photonics and optoelectronics of two-dimensional materials Qiaoliang Bao
14:35	Single crystal growth and magnetotransport in doped and undoped TIs and other related compounds Xiaolin Wang
15:10	Effects of Coulomb screening and disorder on artificial graphene based on nanopatterned semiconductor Oleg Sushkov
15:45	Break Prefunction Area Phoenix Room
16:30	Rump Session for Themes FLEETers
18:30	END OF DAY 2 - GROUP DINNER Chiangmai Thai Restaurant - 2779 Gold Coast Hwy, Broadbeach QLD 4218



FLEET

ARC CENTRE OF EXCELLENCE IN
FUTURE LOW-ENERGY
ELECTRONICS TECHNOLOGIES

FLEET INTRODUCTION WORKSHOP

6 FEB 2017 - 8 FEB 2017

CROWNE PLAZA SURFERS PARADISE

AGENDA	Tuesday, 7 February 2017
8:00	Coffee Prefunction Area Phoenix Room
8:30	Centre Management Discussion FLEETers
9:30	Enabling Technologies Theme A Report: Novel Materials Xiaolin Wang
9:55	Enabling Technologies Theme B Report: Device Fabrication Kourosh Kalantar-zadeh
10:20	Break Prefunction Area Phoenix Room
11:05	Research Theme 1 Report: Topological Dissipationless Systems Alex Hamilton
11:30	Research Theme 2 Report: Exitonic Dissipationless Systems Elena Ostrovskaya
11:55	Research Theme 3 Report: Dynamically Controlled Dissipationless Systems Kris Helmerson
12:30	Lunch Relish Restaurant
13:45	END OF WORKSHOP