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Conference and Advanced School on Low-Dimensional Quantum Systems | (smr 3820)

Monday 13 March 2023

- (13:15-14:15)

time	title	presenter
13:15	Welcome and Registration - coffee/tea	

notitle - (14:15-21:00)

time	title	presenter
14:15	Opening	
15:00	Lecture 1: Disorder and quantum coherence: From ergodicity to Anderson and many-body localization	ALEXANDER MIRLIN
16:00	Lunch break / discussions	
17:30	Superconducting correlations at the edge of a quantum Hall insulator	CARLOS BALSEIRO
18:15	Plasmons and Consistent Dynamical Screening in Two-Dimensional Superconductors	MALTE ROESNER
19:00	Coffee break	
19:30	Emergent two-dimensional superconductivity at the interface with the charge-ordered semiconductor BaBiO ₃	VERÓNICA VILDOSOLA
20:15	The Unruh effect in strained graphene	DANIEL SHEEHY

Tuesday 14 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 1: Electronic Hydrodynamics	BORIS NAROZHNY
15:00	Lecture 2: Disorder and quantum coherence: From ergodicity to Anderson and many-body localization	ALEXANDER MIRLIN
16:00	Lunch break / discussions	
17:30	Diode effects in current-driven Josephson junction	FELIX VON OPPEN
18:15	Contributed talks	
19:00	Coffee break	
19:30	Fluctuation-driven thermal transport in graphene double-layers at charge neutrality	ALEX LEVCHENKO
20:15	New platforms for topological superconductivity	ADY STERN

Wednesday 15 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 2: Electronic Hydrodynamics	BORIS NAROZHNY
15:00	Lecture 3: Disorder and quantum coherence: From ergodicity to Anderson and many-body localization	ALEXANDER MIRLIN
16:00	Lunch break / discussions	
17:30	Topological Spin Transport in Quantum Materials and Entanglement	STEPHAN ROCHE
18:15	Contributed talks	
19:00	Posters session and discussions with coffee/tea and drinks	

Thursday 16 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 3: Electronic Hydrodynamics	BORIS NAROZHNY
15:00	Lecture 4: Disorder and quantum coherence: From ergodicity to Anderson and many-body localization	ALEXANDER MIRLIN
16:00	Lunch break / discussions	
17:30	Designing a “perfect” porphyrin molecule for the Mechanically Controllable Break Junction Experiments	DIANA DULIC
18:15	Metamaterials of fluids of light and sound	ALEJANDRO FAINSTEIN
19:00	Coffee break	
19:30	Superconducting diode effect due to magnetochiral anisotropy in topological insulator and Rashba nanowires	JELENA KLINOVAJA
20:15	Dynamical universality classes with kinematically constrained dynamics	ANDREW LUCAS

Friday 17 March 2023

- (14:15-16:00)

time	title	presenter
14:15	Thermoelectrics of quantum impurity	MIKHAIL KISELEV
15:00	Lecture 5: Disorder and quantum coherence: From ergodicity to Anderson and many-body localization	ALEXANDER MIRLIN

Monday 20 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 1: Topologically Enabled Superconductivity	JOERG SCHMALIAN
15:00	The S=1 XY model with biquadratic interactions on the honeycomb lattice: the case of NiPS ₂	PAULA MELLADO
15:45	Lunch break / discussions	
17:30	Measuring Entanglement in electronic Interferometers	YUVAL GEFEN
18:15	Contributed talks	
19:00	Coffee break	
19:30	Effects of environmentally induced decoherence in dynamical quantum transport	HORACIO PASTAWSKI
20:15	Contributed talks	

Tuesday 21 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 1: An introduction to hydrodynamics for condensed matter physicists	GREGORY FALKOVICH
15:00	Lecture 2: Topologically Enabled Superconductivity	JOERG SCHMALIAN
16:00	Lunch break / discussions	
17:30	Quantum Materials by Desig	ZEILA ZANOLLI
18:15	Contributed talks	
19:00	Coffee break	
19:30	Orbital Hall effect in two-dimensional materials	TATIANA RAPPOPORT
20:15	Twisted Kitaev bilayers	ALESSANDRO PRINCIPI

Wednesday 22 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 2: An introduction to hydrodynamics for condensed matter physicists	GREGORY FALKOVICH
15:00	Measurement induced transitions	ROSARIO FAZIO
15:45	Lunch break / discussions	
17:30	Contributed talks	
18:15	'Diversity in Science' Session	
19:00	Posters session and discussions with coffee/tea and drinks	

Thursday 23 March 2023

- (14:00-21:00)

time	title	presenter
14:00	Lecture 3: An introduction to hydrodynamics for condensed matter physicists	GREGORY FALKOVICH
15:00	Cavity quantum electrodynamics of atomically thin crystals	MARCO POLINI
16:00	Lunch break / discussions	
17:30	Quantum metrology using single electronic spins in solids and molecules	JERÓNIMO MAZE
18:15	Contributed talks	
19:00	Coffee break	
19:30	Flattening conduction and valence bands for interlayer excitons in twisted van der Waals bilayers	ANDREY CHAVES
20:15	Contributed talks	

Friday 24 March 2023

- (14:15-16:15)

time	title	presenter
14:15	Lecture 4: An introduction to hydrodynamics for condensed matter physicists	GREGORY FALKOVICH
15:15	Composite-boson formalism for one-dimensional models	CECILIA CORMICK
16:00	Final remarks - closing	