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College on Energy Transport and Energy Conversion in the Quantum Regime | (smr 3318)

Monday 12 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Registration and Administrative formalities	
10:00	Coffee break	
10:30	Opening Remarks	
11:00	Charge and energy transport in driven electron systems - 1	JANINE SPLETTSTOESER
12:30	Lunch break	
14:30	Quantum dissipation 1	ROSARIO FAZIO
16:00	Group Photo	
16:05	Coffee break	
16:30	Informal discussions	

- Leonardo Building-Terrace (19:00-20:00)

time	title	presenter
19:00	Welcome Reception	

Tuesday 13 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Quantum dissipation 2	ROSARIO FAZIO
10:30	Coffee break	
11:00	Charge and energy transport in driven electron systems 2	JANINE SPLETTSTOESER
12:30	Lunch break	
14:30	Quantum thermoelectricity (experiments) 1	LAURENS MOLENKAMP
16:00	Coffee break	
16:30	Informal discussions	

Wednesday 14 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Quantum thermodynamics and quantum information 1	FERDINAND SCHMIDT-KALER
10:30	Coffee break	
11:00	Quantum thermoelectricity (experiments) 2	LAURENS MOLENKAMP
12:30	Lunch break	
14:30	Quantum thermodynamics and quantum information 2	FERDINAND SCHMIDT-KALER
16:00	Coffee break	
16:30	Informal discussions	

Thursday 15 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Quantum thermoelectricity (experiments) 3	LAURENS MOLENKAMP
10:30	Coffee break	
11:00	Quantum thermodynamics and quantum information 3	FERDINAND SCHMIDT-KALER
12:30	Lunch break	
14:30	Posters and discussions	
15:30	Coffee break	
16:00	Posters and discussions	

Friday 16 August 2019

- Budinich Lecture Hall (09:00-14:30)

time	title	presenter
09:00	Charge and energy transport in driven electron systems 3	JANINE SPLETTSTOESER
10:30	Coffee break	
11:00	Quantum dissipation 3	ROSARIO FAZIO
12:30	Lunch break	

Monday 19 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Maxwell Daemon 1	ROSA LOPEZ
10:30	Coffee break	
11:00	Quantum fluctuation-dissipation relations 1	JUAN PARRONDO
12:30	Lunch break	
14:30	Quantum thermodynamics in electronic circuits 1	JUKKA PEKOLA
16:00	Group photo	
16:05	Coffee break	
16:30	Informal discussions	

Tuesday 20 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Quantum Floquet engineering 1	ANATOLI POLKOVNIKOV
10:30	Coffee break	
11:00	Quantum thermoelectricity (theory) 1	GIULIANO BENENTI
12:30	Lunch break	
14:30	Quantum thermodynamics in electronic circuits 2	JUKKA PEKOLA
16:00	Coffee break	
16:30	Informal discussions	

Wednesday 21 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Quantum Floquet engineering 2	ANATOLI POLKOVNIKOV
10:30	Coffee break	
11:00	Maxwell Daemon 2	ROSA LOPEZ
12:30	Lunch break	
14:30	Quantum thermodynamics in electronic circuits 3	JUKKA PEKOLA
16:00	Coffee break	
16:30	Informal discussions	

Thursday 22 August 2019

- Budinich Lecture Hall (09:00-18:30)

time	title	presenter
09:00	Quantum Floquet engineering 3	ANATOLI POLKOVNIKOV
10:30	Coffee break	
11:00	Quantum thermoelectricity (theory) 2	GIULIANO BENENTI
12:30	Lunch break	
14:30	Quantum fluctuation-dissipation relations 2	JUAN PARRONDO
16:00	Coffee break	
16:30	Posters and discussions	

Friday 23 August 2019

- Budinich Lecture Hall (09:00-17:30)

time	title	presenter
09:00	Quantum fluctuation-dissipation relations 3	JUAN PARRONDO
10:30	Coffee break	
11:00	Quantum thermoelectricity (theory) 3	GIULIANO BENENTI
12:30	Lunch break	
14:30	Maxwell Daemon 3	ROSA LOPEZ
16:00	Coffee break	
16:30	Informal discussions	

Monday 26 August 2019

- Budinich Lecture Hall (08:30-19:10)

time	title	presenter
08:30	Registration	
09:15	Opening	
09:30	Thermodynamics of Quantum Information Flows	MASSIMILIANO ESPOSITO
10:15	Passivity Deformation Approach to High Resolution Thermodynamics in Isolated Quantum Setups	RAAM UZDIN
11:00	Coffee break	
11:30	Multidimensional non-equilibrium steady states from topological degeneracy	YUVAL GEFEN
12:15	Lunch break	
14:00	Transport of energy in integrable and near-integrable quantum systems	JOEL MOORE
14:45	Exact analysis of quantum phases in holonomic qubit manipulations	ANTON RAMSAK
15:30	Group photo	
15:35	Coffee break	
16:00	Fingerprint of topological Andreev bound states in electrical and heat transport	EWELINA HANKIEWICZ
16:45	Quasiperiodic quantum thermal machines	CECILIA CHIARACANE
16:55	A widely applicable formalism for transport under time-periodic temperatures and chemical potentials	ARCHAK PURKAYASTHA
17:05	Quantum thermodynamics of adiabatically driven system: Deriving master equations using non-equilibrium Green's function	BIBEK BHANDARI
17:15	Geometrical properties of periodically driven adiabatic quantum thermal machines	PABLO GASTON TERREN ALONSO
17:25	Free time, discussions	

- Budinich Lecture Hall (LB) (19:30-21:00)

time	title	presenter
19:30	Welcome Reception	

Tuesday 27 August 2019

- Budinich Lecture Hall (09:00-19:00)

time	title	presenter
09:00	Realization of an efficient quantum-dot heat engine	HEINER LINKE
09:45	Heat Transport and Thermopower in a Single-Quantum-Dot Device	CLEMENS WINKELMANN
10:30	Coffee break	
11:00	Periodic (Floquet) driving of $e/3$ and $e/5$ Anyons in the Fractional Quantum Hall Regime	CHRISTIAN GLATTLI
11:45	Nanoscale Quantum Calorimetry and Electronic Temperature Fluctuations	PETER SAMUELSSON
12:30	Lunch break	
14:00	Non-local thermoelectricity & entanglement manipulation in hybrid-systems	ALESSANDRO BRAGGIO
14:45	A comprehensive analysis of a fully solvable quantum heat engine	MARYAM AFSARY
15:15	Energy conservation, efficiency, and steady-state of quantum motors and pumps described by higher-order expansions of their non equilibrium sources	RAUL BUSTOS MARUN
15:45	Coffee break	
16:15	Short presentations posters	
17:00	Poster session	

Wednesday 28 August 2019

- Budinich Lecture Hall (09:00-18:00)

time	title	presenter
09:00	Non-equilibrium impurities: Fluctuation Induced Quantum Zeno Effect in Ultracold Atomic Wires	SEBASTIAN DIEHL
09:45	Quantum measurement as a thermodynamic resource	MICHELE CAMPISI
10:30	Coffee break	
11:00	Quantum Signatures in the Work Distribution	MARTI PERARNAU LLOBET
11:30	Quantum Martingale Theory and Entropy Production	PAULE GONZALO MANZANO
12:00	Thermodynamic Uncertainty relations as a consequence of fluctuation theorems	GABRIEL LANDI
12:30	Lunch break	
14:00	Quantum thermodynamic devices under control	GERSHON KURIZKI
14:45	A non-equilibrium system as a demon	ROBERT WHITNEY
15:30	Spin and Energy Transport in Integrable and Non-integrable Classical Heisenberg Spin Chain	AVIJIT DAS
15:40	Coffee break	
16:30	ICTP CMSP Colloquium on Heat to Work Conversion in the Quantum Regime	PROF. LILIANA ARRACHEA

Thursday 29 August 2019

- Budinich Lecture Hall (09:00-14:00)

time	title	presenter
09:00	Fluctuation-driven Coulomb drag in double quantum dots	DAVID SANCHEZ
09:45	Thermoelectricity and heat transport in single-electron systems	FABIO TADDEI
10:30	Coffee break	
11:00	Prethermalization and thermalization in isolated quantum systems	MARCOS RIGOL
11:45	Rectification of spin and heat currents	DARIO POLETTI
12:30	Adiabatic quantum motors and pumps in strongly interacting systems	FEDERICO RIBETTO
12:40	Halogenation of SiGe monolayer: Robust change in electronic and thermal transport	KAGDADA HARDIK
12:50	Lunch break	

Friday 30 August 2019

- Budinich Lecture Hall (09:00-14:00)

time	title	presenter
09:00	Autonomous entanglement engines: open questions when using the reset master equation	GERALDINE HAACK
09:45	Tools and progress in experiments on thermodynamics with ion traps	CHRISTIAN SCHMIEGELOW
10:30	Coffee break	
11:00	Current rectification and mobility edges	VINITHA BALACHANDRAN
11:30	Enhanced performance of a quantum dot based nanomotor due to Coulomb interactions	MARIA FLORENCIA LUDOVICO
12:00	Coherence orders, decoherence, and quantum metrology	DIEGO PIRES
12:30	Closing ceremony	
12:45	Lunch break	