

International Workshop on “Transport Properties of Low-Dimensional Electronic Materials”

Workshop Programme

Tuesday 19 th September 2017		
08:30 - 08:50	Registration	
08:50 - 09:00	Opening	
Time	Speaker	Title of talk
09:00 - 09:50	Pawel Machnikowski	30 years of self-assembled quantum dot physics: a theoretical perspective
09:50 - 10:40	Katarzyna Roszak	Generation of qubit-environment entanglement via pure dephasing processes
10:40 - 11:10	Break	
11:10 - 12:00	Reza Asgari	Plasmon modes in two-dimensional crystalline systems
12:00 - 12:30	Tomasz Wozinak	First-principles investigations of lattice dynamics of chosen transition metal dichalcogenides systems
12:30 - 14:00	Lunch	
14:00 - 14:50	Saeed Abedinpour	Optical Conductivity of Topological Semimetals
14:50 - 15:20	Leyla Majidi	Charge/Spin transport in new 2D materials
15:20 - 15:50	Break	
15:50 - 16:40	Jaroslav Pawlowski	Spin and valley qubits: operations and coupling
16:40 - 17:30	Ali Ghorbanzadeh	Inducing exotic superconductivity in two-dimensional materials

Wednesday 20th September 2017

Time	Speaker	Title of talk
09:20 - 10:10	Pawel Machnikowski	Quantum optics with quantum dots
10:10 - 10:40	Zahra Nourbakhsh	Electron transport in phosphorene nanoribbons
10:40 - 11:10	Break	
11:10 - 12:00	Babak Zare Rameshti	Thermoelectric transport in two-dimensional materials
12:00 - 12:30	Andy Paul Chen	Effects of B- and C-doping on tunneling magnetoresistance in CoFe/MgO magnetic tunnel junctions
12:30 - 14:00	Lunch	
14:00 - 14:50	Katarzyna Roszak	Equivalence of qubit-environment entanglement and discord generation via pure dephasing interactions and the consequences thereof
14:50 - 15:20	Amir Eskandari	Numerical Realization of Stochastic Dynamics of an Open Quantum-Dot System
15:20 - 15:50	Break	
15:50 - 16:40	Pawel Potasz	Topological properties of BiSb monolayers
16:40 - 17:00	Closing	