

Workshop, 7-10/8/2016

The Porter School Building, Auditorium, Tel Aviv University

Sunday 7/8/2016	
09:00-09:30	Registration & light breakfast
09:30-09:45	Opening remarks
Morning session	Chair: Oded Hod
09:45-10:20	"Normal and Anomalous Diffusion of Atoms in Real Space and Frequency Space" Nir Davidson, Weizmann Institute of Science, Israel
10:25-11:00	"Irreversibility and Non-equilibrium Fluctuations at the Nanoscale: Dynamic Relaxation of a Levitated Glass Bead" Christoph Dellago, University of Vienna, Austria
11:05-11:30	Coffee break
11:30-12:05	"The Micromechanics of Cellularized Biopolymer Materials" Herbert Levine, Rice University, Texas, USA
12:10-12:45	"Finding a New Job for Maxwell's Demon: Improving Free Energy Calculations" Saar Rahav, Technion - Israel Institute of Technology, Israel
12:50-14:30	Lunch
Afternoon session	Chair: Michael Urbakh
14:30-15:05	"Dynamics and Statics of Three-Dimensional Jamming Percolation" Yair Shokef, Tel Aviv University, Israel
15:10-15:45	"Universal Statistics of Low-frequency Vibrational Modes in Disordered Solids" Eran Bouchbinder, Weizmann Institute of Science, Israel
15:50-16:15	Coffee break
16:15-16:50	"Force Chains and Force Laws in Granular Systems" Itamar Procaccia, Weizmann Institute of Science, Israel
16:55-17:30	"Response-Correlation Inequality in Dynamical Systems" Eytan Katzav, The Hebrew University of Jerusalem, Israel
18:45-	Workshop dinner for all speakers and participants @ Goshen restaurant

Monday 8/8/2016	
09:00-09:30	Light breakfast
Morning session	Chair: Yonatan Dubi
09:30-10:05	"Nonequilibrium Charge Transport in Molecular Junctions: Vibrational Effects and Transient Phenomena" Michael Thoss, University of Erlangen-Nuremberg, Germany
10:10-11:45	"Plasmon Controlled Molecular Junctions" Yoram Selzer, Tel Aviv University, Israel
10:50-11:15	Coffee break
11:15-11:50	"Taming the Dynamical Sign Problem in Quantum Many-body Systems: Advances in Inchworm Monte Carlo" Guy Cohen, Tel Aviv University, Israel
11:55-12:30	"Dissipation Induced Topological Insulators: A Recipe" Moshe Goldstein, Tel Aviv University, Israel
12:35-14:35	Lunch + Group Photo
Afternoon session	Chair: Michael Thoss
14:35-15:10	"Interplay Between Geometry and Dephasing and the Increase of Power Output in Photosynthetic Exciton Transfer Networks" Yonatan Dubi, Ben-Gurion University, Israel
15:15-15:50	"First Detection Time for a Quantum Walker" David Kessler, Bar-Ilan University, Israel
15:55-16:30	"Classical and Quantum Non-equilibrium Dynamics of Nonlinear Nanomechanical Systems" Ron Lifshitz, Tel Aviv University, Israel
16:30-18:30	Poster session (beer and snacks)

Tuesday 9/8/2016	
All day	Excursion

Wednesday 10/8/2016	
09:00-09:30	Light breakfast
Morning session	Chair: Yariv Kafri
09:30-10:05	" Intermediate Dynamic Length Scale in Complex Fluids " Haim Diamant, Tel Aviv University, Israel
10:10-11:45	" Statistical Physics of Stochastic Reaction Networks " Ofar Biham, The Hebrew University of Jerusalem, Israel
10:50-11:15	Coffee break
11:15-11:50	" Statistics of Discrete Motor-driven Events in Reorganizing Active Networks " Yael Roichman, Tel Aviv University, Israel
11:55-12:30	" Theory for Multi-motor Driven Nano-carriers with Application to Rational Design " Rony Granek, Ben-Gurion University, Israel
12:35-14:00	Lunch
Afternoon session	Chair: Yael Roichman
14:00-14:35	" Pressure in Active Systems " Yariv Kafri, Technion - Israel Institute of Technology, Israel
14:40-15:15	" Dynamics of Tracers within Living Cells and Active Gels " Nir Gov, Weizmann Institute of Science, Israel
15:20-15:45	Coffee break
15:45-16:20	" Quantum and Classical Simulations of Enzymatic Reactions – Case Studies " Dan Major, Bar-Ilan University, Israel
16:25-17:00	" Chaos, Metastability and Ergodicity in Atomtronic Superfluid Circuits " Doron Cohen, Ben-Gurion University, Israel

Sponsors:

1. School of Chemistry @ Tel Aviv University.
2. The Sackler Institute for Chemical Physics.