



מכון ויצמן למדע

WEIZMANN INSTITUTE OF SCIENCE

STATISTICAL MECHANICS DAY V

June 25, 2012

09:30 to 17:00

Weizmann Institute of Science

Physics Building, Weissman Auditorium

- 09:30 – 09:40 Opening Remarks – David Mukamel
- 09:40 – 10:00 Nir Davidson, Weizmann Institute
Phase synchronization of coupled lasers on complex networks
- 10:00 – 10:20 Ofer Feinerman, Weizmann Institute
Ant particles (?)
- 10:20 – 10:40 Or Cohen, Weizmann Institute
Density large-deviations of nonconserving driven models
- 10:40 – 11:00 Guy Bunin, Technion
Rare events in driven diffusive systems – numerics and simple models
- Coffee Break*
- 11:30 – 11:50 Scott Kirkpatrick, Hebrew University
Inferring function from structure in communication networks
- 11:50 – 12:10 Neri Merhav and Yariv Kafri, Technion
Bose–Einstein condensation in the large deviations regime with applications to information system models
- 12:10 – 12:30 Giulio Biroli, CEA Saclay
Ideal glass transitions by random pinning
- 12:30 – 12:50 Shlomi Reuveni¹ Uri Yechiali¹ and Iddo Eliazar²
Tel Aviv University¹ and Holon Institute of Technology²
The asymmetric inclusion process

Lunch Break

- 14:00 – 14:20 Erez Braun, Technion
Protein fluctuations in a cell population: universality and collective modes
- 14:20 – 14:40 Jay Fineberg, Hebrew University
Static friction coefficient is not a material constant
- 14:40 – 15:00 Shmuel Rubinstein, Weizmann Institute
Bacterial biofilms: bugs can see the big picture
- 15:00 – 15:20 Yosi Yeshurun, Bar-Ilan University
Broadening of the resistive transition in Y-Ba-Cu-O nano wires

Coffee Break

- 15:50 – 16:10 D. Hurowitz, Ben Gurion University
The non-equilibrium steady state of sparse systems with non-trivial topology
- 16:10 – 16:30 Yossi Avron, Technion
Adiabatic quantum transport in open systems
- 16:30 – 16:50 David J. Bergman, Tel Aviv University
Self-consistent effective-medium approximation for strong-field magneto-transport in a composite medium