



מכון ויצמן למדע
WEIZMANN INSTITUTE OF SCIENCE

STATISTICAL MECHANICS DAY II

May 4, 2009

09:30 to 17:10

Weizmann Institute of Science
Physics Building, Weissman Auditorium

- 09:30 – 09:40 Opening Remarks - David Mukamel
- 09:40 – 10:00 Baruch Meerson - Hebrew University
Large fluctuations in stochastic populations
- 10:00 – 10:20 Isaac Goldhirsch -Tel-Aviv University
*Coarse graining for single realizations, elasticity, plasticity
and the Cosserat problem*
- 10:20 – 10:40 Jay Fineberg - Hebrew University
Slip-stick: the destruction and resurrection of sliding surfaces
- 10:40 – 11:00 Moshe Schwartz -Tel Aviv University
Response-correlation inequality in dynamical systems
- Coffee Break*
- 11:30 – 11:50 Sam Safran - Weizmann Institute of Science
Active response of biological cells to mechanical stress
- 11:50 – 12:10 Eshel Ben-Jacob –Tel Aviv University
Learning from bacteria about information processing
- 12:10 – 12:30 Erez Braun - Technion
The many-body nature of gene interaction
- 12:30 – 12:50 Tsvi Tlusty -Weizmann Institute of Science
The physical language of molecules

Lunch Break

- 14:00 – 14:20 Ido Kanter - Bar-Ilan University
Public channel cryptography: chaos synchronization and Hilbert's tenth problem
- 14:20 – 14:40 Joseph Klafter - Tel Aviv University
Strange kinetics of proteins
- 14:40 – 15:00 Ofer Biham - Hebrew University
Stochastic analysis of complex reaction networks
- 15:00 – 15:20 David Kessler - Bar-Ilan University
Sampling growing populations: family size statistics
- Coffee Break*
- 15:50 – 16:10 Yitzhak Rabin - Bar-Ilan University
Model of DNA bending by cooperative binding of proteins
- 16:10 – 16:30 Sorin Solomon - Hebrew University
How do economies grow, how do they interact, how do they fall and how do they recover
- 16:30 – 16:50 Dov Levine - Technion
Correlation length for amorphous systems
- 16:50 – 17:10 David Bergman - Tel Aviv University
Strong-field magneto-transport in a composite medium: How simple can it get?

Organizers :

Prof. G. Falkovich, Prof. D. Mukamel, Weizmann Institute of Science

To help us plan the event please register by email :

Mrs. Perla Zalcberg – Perla.Zalcberg@weizmann.ac.il