



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 :

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