

Soft and Biological Matter

TAU-ESPCI Paris Workshop

Pierre-Gilles de Gennes Institute

PROGRAM

Monday, 6th March 2017

- 08:45 - 09:00 Welcome
- 09:00 - 09:15 **Workshop opening**
Jean-François Joanny (ESPCI)
Haim Diamant (TAU)
- 09:15 - 09:45 **Roy Beck-Barkai (TAU)**
Making order out of disorder: why is the neuronal cell scaffold constructed with disordered building blocks?
- 09:45 - 10:15 **Benoit Roman (ESPCI)**
Stamping, wrinkling and actuation of thin sheets
- 10:15 - 10:35 Coffee Break
- 10:35 - 11:05 **Michael Urbakh (TAU)**
Electrotunable Friction with Ionic Liquid Nanoscale Films
- 11:05 - 11:35 **Olivier Dauchot (ESPCI)**
Active dynamics in model non biological experimental systems
- 11:35 - 12:05 **Michael Kozlov (TAU)**
Modeling lipid droplets on curved membranes
- 12:15 - 13:45 Lunch (ESPGG)
- 14:00 - 14:30 **Jean-François Joanny (ESPCI)**
Bead transport by molecular motors on actin filaments
- 14:30 - 15:00 **Roey Amir (TAU)**
Disassembling polymeric micelles with enzymes
- 15:00 - 15:30 **Olivia du Roure (ESPCI)**
Growth and mechanics of actin networks
- 15:30 - 15:50 Coffee Break
- 15:50 - 16:20 **Yair Shokef (TAU)**
Combinatorial design of textured mechanical metamaterials
- 16:20 - 16:50 **Anthony Maggs (ESPCI)**
Statistical mechanics with Maxwell's equations

Tuesday, 7th March 2017

- 09:15 - 09:45 **Haim Diamant (TAU)**
Screening, instability, and hyperuniformity in the sedimentation of irregular objects
- 09:45 - 10:15 **Elie Raphaël (ESPCI)**
Dynamical properties of thin polymer films
- 10:15 - 10:35 Coffee Break
- 10:35 - 11:05 **Shlomi Reuveni (TAU)**
First passage under restart
- 11:05 - 11:35 **Ludwik Leibler (ESPCI)**
Principles of vitrimer physics and chemistry
- 11:35 - 12:05 **Eran Peirson (TAU)**
Molecular Communication Mechanisms of Neuron
- 12:15 - 13:45 Lunch (ESPGG)
- 14:00 - 14:30 **Eric Clément (ESPCI)**
Bacterial suspensions: A living example of active fluid
- 14:30 - 15:00 **Yael Roichman (TAU)**
Discrete motor driven active event in acto-myosin networks
- 15:00 - 15:30 **Anke Lindner (ESPCI)**
Transport dynamics of complex particles in microfluidic flows
- 15:30 - 15:50 Coffee Break
- 15:50 - 16:20 **Yoav Lahini (TAU)**
Memory retention in disordered mechanical systems
- 16:20 - 16:50 **Clément Nizak (ESPCI)**
An experimental approach to statistical molecular evolution
- 16:50 - 17:10 **Closing remarks and discussion**