

APPLIED STATISTICAL PHYSICS

GUNTON-FEST, May 5 (Friday): Inn at Loretto (Chaco room)

Breakfast: 7:30 – 8:45 am

8:45 – 9:00 am Opening remarks [Avadh Saxena (LANL) & Bill Klein (Boston U)]

Chair: Avadh Saxena

9:00 – 9:30 am Martin Grant (McGill Univ.)

Generation of $1/f$ Noise Motivated by a Model for Musical Melodies

9:30 – 10:00 am Per Rikvold (Florida State Univ.)

Fluctuations in an Ising ferromagnet driven by a slowly oscillating field with a constant bias

10:00 – 10:30 am (coffee break)

Chair: Bill Klein

10:30 – 11:00 am Michel Droz (Univ. Geneva)

On the Role of Fluctuations in the Modeling of Complex Systems

11:00 – 11:30 am Jeff Rickman (Lehigh Univ.)

Computer Simulation of Interfacial Transitions at Surfaces and Grain Boundaries

11:30 – Noon Jorge Vinals (Univ. Minnesota)

Mesoscale models of defect motion

Noon – 1:30 pm (Lunch, on your own)

Chair: Michael Schick

1:30 – 2:00 pm Sidney Redner (Santa Fe Institute)

Mysteries of Zero-Temperature Coarsening

2:00 – 2:30 pm Bill Klein (Boston Univ.)

Nucleation in Deeply Quenched Systems with Long Range Interactions

2:30 – 3:00 pm Raul Toral (IFISC, Mallorca)

Constructive Effects Induced by Diversity

3:00 – 3:30 pm (coffee break)

Chair: Jacques Amar

3:30 – 4:00 pm Kimmo Kaski (Aalto University)

Social Physics: Data-driven Discovery of Social Connectome

4:00 – 4:30 pm Haowen Xi (Bowling Green State Univ.)

Empirical statistical analysis of stock market - a collective dynamical network view

4:30 – 5:00 pm Eli Ben-Naim (Los Alamos)

Escape and Finite-Size Scaling in Reaction-Diffusion Processes

MCs: Jorge Vinals & Dimitrios Vavylonis

6:30 – 9:30 pm Banquet (Friday evening, May 5) Tesuque Ballroom

GUNTON-FEST, May 6 (Saturday): Inn at Loretto (Chaco room)

Breakfast: 7:30 – 8:30 am

Chair: Kimmo Kaski

8:30 – 9:00 am Jim Gunton (Lehigh University)

Early stage aggregation of a coarse grained model of polyglutamine

9:00 – 9:30 am Michael Schick (Univ. Washington)

What effect does a small amount of an additional component have on the miscibility transition temperature of a multi-component membrane?

9:30 – 10:00 am Debashish Chowdhury (IIT Kanpur)

Rupture of transient molecular joints as rare events: jump over a barrier to catch or slip?

10:00 – 10:30 am (coffee break)

Chair: Martin Grant

10:30 – 11:00 am Jacques Amar (Univ. Toledo)

Temperature-accelerated dynamics simulations of thin-film growth

11:00 – 11:30 am Dimitrios Vavylonis (Lehigh Univ.)

Thermodynamic Considerations in Actin Turnover Kinetics and Spatial Organization in Confinement

11:30 – Noon Tapio Ala-Nissila (Aalto Univ. & Loughborough Univ.)

Tension Propagation Theory of Driven Polymer Translocation

Noon – 1:30 pm (Lunch, on your own)

Chair: Per Rikvold

1:30 – 2:00 pm Geoff West (Santa Fe Institute)

TBD

2:00 – 2:30 pm Royce Zia (Virginia Tech)

Persistent Probability Currents and their Manifestations in Non-equilibrium Steady States

2:30 – 3:00 pm Daniel Ou-Yang (Lehigh Univ.)

Osmotic equation of state and phase separation of colloidal suspensions

3:00 – 3:30 pm (coffee break)

Chair: Jeff Rickman

3:30 – 4:00 pm Turab Lookman (Los Alamos)

Accelerated Materials Discovery via Informatics

4:00 – 4:30 pm Wei Li (Oak Ridge)

Polymer-mediated Colloidal Interaction: Depletion Effect and Entropic Force

4:30 – 5:00 pm Nate Wentzel (Milligan College)

Rotator Phases: Insights Into Partially Ordered Solids via Molecular Simulation

5:00 – 5:15 pm Video clips: Rashmi Desai (Univ. Toronto) & Maxi San Miguel (IFISC, Mallorca)

5:15 – 5:30 pm Closing remarks & Farewell

6:00 – 8:00 pm Social and Informal Dinner (Venue: TBD).