

## Tel Aviv University (TAU) Ludwig-Maximilians-Universität München (LMU) Workshop on Biophysics

May 9-10, 2018 - Trubowicz Law Building, Room 206, Tel Aviv University

### **Wednesday, May 9:**

- 8:30-9:00 *Registration*
- 9:00-9:30 Yasmine Meroz (TAU), "Uncovering organismal memory phenomena: from cellular chemotaxis to plant tropisms"
- 9:30-10:00 Erwin Frey (LMU), "Rethinking pattern formation in reaction-diffusion systems"
- 10:00-10:30 Roy Beck (TAU), "From kB to kB: Universal and efficient entropy estimation using a compression algorithm"
- 10:30-11:00 *Coffee*
- 11:00-11:30 Joachim Rädler (LMU), "Structured surfaces for gene expression and cell migration single cell studies"
- 11:30-12:00 Ayelet Lesman (TAU), "Interaction of contractile cells with the extracellular fibrous matrix"
- 12:00-13:00 *Lunch*
- 13:00-15:00 *Lab Tours & Discussions*
- 15:00-15:30 Stefan Zahler (LMU), "Artificial angiogenesis"
- 15:30-16:00 Shlomi Reuveni (TAU), "Sculpted by self-replication"
- 16:00-16:30 *Coffee*
- 16:30-17:00 Claudia Veigel (LMU), "Regulation and membrane interactions of molecular myosin motors"
- 17:00-17:30 Michael Kozlov (TAU), "Modeling formation of caveolar super-structures"

### **Thursday, May 10:**

- 8:30-9:00 *Registration*
- 9:00-9:30 Yoav Lahini (TAU), "Fast, label free optical nanoscopy: towards measurements of single-virus dynamics"
- 9:30-10:00 Esther Zanin (LMU), "An aster-based signal patterns the cortex during cytokinesis"
- 10:00-10:30 David Sprinzak (TAU), "Design principles of cell-cell signaling systems"
- 10:30-11:00 *Coffee*
- 11:00-11:30 Hermann Gaub (LMU), "Bacterial adhesion by single molecule force spectroscopy in vitro and in silico"
- 11:30-12:00 Roey Amir (TAU), "Designing polymeric amphiphiles with high molecular precision"
- 12:00-13:00 *Lunch*
- 13:00-14:30 *Poster Session & Discussions*
- 14:30-15:00 Don Lamb (LMU), "Fluorescence methods for elucidating the mechanisms of life"
- 15:00-15:30 Yair Shokef (TAU), "Elastic interactions between living cells"
- 15:30-16:00 Chase Broedersz (LMU), "Feeling the tension: cell-induced stresses in the extracellular matrix"
- 16:00-16:30 *Coffee*
- 16:30-17:00 Yael Roichman (TAU), "Long range correlated motion of plasma membrane proteins"
- 17:00-17:30 Dieter Braun (LMU), "Nonequilibrium biophysics for the origin of life"