



The Center for Physics and  
Chemistry of Living Systems  
Tel Aviv University

## TAU BioSoft Day #2

July 8, 2021

Webb Building, Tel Aviv University

- 09:00–09:30 Gathering
- 09:30–10:00 **Efi Efrati** (Weizmann Institute of Science)  
*Cumulative geometric frustration and the intrinsic approach in physical assemblies*
- 10:00–10:10 **Deborah Schwarcz** (Bar-Ilan University)  
*Thermal and topological noise impact on self-assemble processes*
- 10:10–10:40 **Tom Shemesh** (Technion)  
*A role for the endoplasmic reticulum in the cellular distribution of microtubules*
- 10:40–10:50 **Shiran Ziv Sharabani** (Tel-Aviv University)  
*Messy to ordered: The role of fiber diameter in determining the shape morphing behavior of 2D networks constructed of mesoscale responsive fibers*
- 10:50–11:20 Coffee
- 11:20–11:50 **Yitzhak Rabin** (Bar-Ilan University)  
*Aggregation of intrinsically disordered proteins*
- 11:50–12:00 **Raj Kumar Sadhu** (Weizmann Institute of Science)  
*Modelling cellular spreading and emergence of motility in the presence of curved membrane proteins and active cytoskeleton forces*
- 12:00–12:30 **Bat-El Pinchasik** (Tel-Aviv University)  
*How can interfacial phenomena in nature inspire smaller robots?*
- 12:30–13:45 Lunch
- 13:45–14:15 **Ady Vaknin** (The Hebrew University of Jerusalem)  
*Long-term positional dynamics of chemoreceptor clusters*
- 14:15–14:25 **Omer Granek** (Technion)  
*The anomalous transport of tracers in active baths*
- 14:25–14:55 **Oleg Krichevsky** (Ben-Gurion University of the Negev)  
*Probing DNA structure with optical super-resolution: from plasmids to bacterial chromosome*
- 14:55–15:30 Coffee
- 15:30–16:00 **Hillel Aharoni** (Weizmann Institute of Science)  
*Smectic description of wrinkling patterns*
- 16:00–16:10 **Bin Zheng** (Tel-Aviv University)  
*Enhanced electro-actuation in dielectric elastomers: the non-linear effect of free ions*
- 16:10–16:40 **Shelly Tzliil** (Technion)  
*Elastic mediated interactions between cells*