



ARNOLD SOMMERFELD  
CENTER FOR THEORETICAL PHYSICS



# Sommerfeld Theory Colloquium

**Wednesday, 15th December 2021**

at 16.15 h

**Dr. Isabella Graf**  
(Yale University)

***ASC PhD prize colloquium:***  
**Self-organization and self-assembly in biologically inspired non-equilibrium systems**

The goal of my PhD thesis was to study principles of biological self-organization and self-assembly by means of theoretical modeling. To this end, we considered conceptual models inspired by different biological settings. In this talk, I will present our approach to better understand complex biological systems based on two projects. The first one addresses the question of how in networks of motor-crosslinked filaments macroscopic, collective dynamics arise from interactions between individual network constituents. The second project is concerned with the self-assembly of heterogeneous structures and focuses on the effect of fluctuations on assembly efficiency and robustness.

via ZOOM

Erwin Frey