



# Münchner Physik- Kolloquium

at home!  
Winter  
2020/21

Dieses Semester findet das Kolloquium online statt: <https://tum-conf.zoom.us/j/93234766313>

## Verleihung des Theodor-Hänsch-Promotionspreises

### Self-organization and self-assembly in biologically inspired non-equilibrium systems

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Monday, 8 February 2021, 17:15 h

<https://tum-conf.zoom.us/j/93234766313> Meeting-ID: 932 3476 6313 Password: Kolloquium

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The goal of my thesis was to study principles of biological self-organization and self-assembly by means of theoretical modeling. To this end, we considered several 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.

