

New  
Colloquium  
Series

Zentrum für Biophysik  
Center for Biophysics



UNIVERSITÄT  
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SAARLANDES

# Dora Tang

Saarland University

ZBP Colloquium, Thursday, April 24, 2025

## **From molecules to life: building living systems from scratch**

In this talk, I will provide an overview of the strategies we adopt in our lab to build living systems from scratch that rely on reactions, compartments and communication as the defining feature to support out-of-equilibrium behaviour. Specifically, I will talk about the design and synthesis of artificial cells based on liquid-liquid phase separation (coacervation) and hydrophobic effects such as lipid vesicles and proteinosomes and describe how these compartments may be used as platforms for implementing life-like behaviours including: oscillations and communication. I propose that our bottom-up approaches are effective in establishing living systems from scratch and in doing so provide unique model systems that can help to unravel the physico-chemical principles of living systems.

<https://tinyurl.com/zbp-tang20250424>

Talk: 14:15

Tea/Coffee at 14:00

Campus Saarbrücken

Building C6.4

Room 0.09 (Lecture Hall II)

Schedule



Teams link

