University of Basel
Department Biozentrum

SIB Swiss Institute of Bioinformatics

BIOZENTRUM
The Center for Molecular Life Sciences

Basel Computational Biology Seminar
22830 Current research in Bioinformatics I

Prof. Thomas C.T. Michaels
Physics of protein phase transitions

Proteins are fundamental to the physiological functions of living cells. An important aspect of protein function stems from the many possible states in which proteins can be found. In the majority of cases, proteins exert their functions not as individual molecules but as part of larger-scale assemblies, which include mesoscale solid and liquid condensed phases. In this talk, I will discuss our work in characterizing the transitions between these phases from a soft matter physics perspective. I will particularly focus on protein aggregation kinetics and its connections to protein misfolding diseases, the role of liquid condensates, and the prospects of using reversible aggregate transitions for information processing within cells.

Speaker Information

Name: Thomas C.T. Michaels
Institute: Inst. of Biochemistry
ETH-Zürich

Event Details

Date: Monday, November 9, 2026
Time: 16:15 – 17:15 h
Location: Biozentrum, 02.073
Host: Inayat Ullah Irshad (Zavolan lab), inayat.ullahirshad@unibas.ch