



University
of Basel

Department
Biozentrum



Swiss Institute of
Bioinformatics

BIOZENTRUM

The Center for
Molecular Life Sciences

Basel Computational Biology Seminar

Prof. Thomas Michaels

ETH Zürich

Zürich, Switzerland

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 and its connections to protein misfolding diseases, our efforts to uncover the potential functional roles of liquid condensates, and the prospects of using reversible aggregate transitions for information storage and processing within cells.

Date: **Monday, 10 November**

Time: **16:15 h – 17:15h**

Location: **Biozentrum, 2.073**

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