

UniCat Colloquium

PROF. PETRA WENDLER

Institute of Biochemistry and Biology, University of Potsdam

3D snapshots of dynamic macromolecular machines using single particle cryo EM

Recent advances in cryo electron microscopy allow for near atomic structure determination of biological macromolecules. Following an introduction into single particle cryo electron microscopy techniques and advances, current projects in the lab are presented.

Particular focus will be on a comparison of contractile nanomachines related to the bacterial type VI secretion tubule. The Type VI secretion system is an intracellular apparatus to inject effector proteins into bacterial and eukaryotic cells.

Although sharing homology with other contractile systems like R-type pyocins, the Type VI secretion system is additionally equipped with a recycling function, which makes it more suitable for multiple rounds of action. Starting from the 3D reconstructions, I compare these molecular machines structurally and functionally to their viral counterpart, the T4 phage tail.

Wednesday, October 19, 2016 at 5:15 PM

TU Berlin, Institute of Chemistry Straße des 17. Juni 115, 10623 Berlin

Building C, Lecture Hall C 264

Prof. Dr. Leimkuehler (UP) Organizer

Coffee and cake will be served 30 minutes before the lecture. Guests are cordially invited to attend! Prof. Dr. Matthias Driess - Chair of the Cluster of Excellence UniCat - www.unicat.tu-berlin.de











