

2023. 11. 14 (Tuesday) 11:00 - 12:00

Speaker: Prof. Claudia Veigel

Department of Cellular Physiology and Centre of Nanosciences (CeNS) (Chairs) Ludwig-Maximilians-University Münich

Title:

Membrane-reshaping by myosin-lipid interactions and single molecule studies of myosin regulation

Prof. Veigel tries to understand the molecular mechanisms coordinating membrane shaping by motor protein-lipid interaction, which is critical for functioning of living cells. In the first part, Prof. Veigel will show that self-organising protein-lipid domains of the motor protein myosin-VI (MYO6) and cargo lipid induce tube reshaping and scission without catalytic activity of MYO6. In the second part, she will describe single-molecule optical tweezers studies highlighting that a single MYO6 phosphorylation event can control nucleotide-exchange as well as the velocities and forces for translocating actin filaments.

Website:

https://www.cell.physiol.med.unimuenchen.de/personen/mitarbeiter/veigel/index.html

Venue: OIST Lab4 F01

Contact: OIST Membrane Cooperativity Unit, Aki Kusumi

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