

SCIENTIFIC SEMINAR



Prof. Gilad Haran

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The Secret Ultrafast Motions of Protein Nanomachines

Multiple proteins function as nanomachines, alternating chemical steps with conformational transitions. Single-molecule FRET (smFRET) spectroscopy is a powerful tool to study the internal motions of protein machines during activity. We have used this capability to probe the dynamics of several proteins.

A general paradigm, based on two time scales, seems to arise from these studies. Structural fluctuations take place on very short time scales, down to microseconds, while the (chemical) activity cycles of these machines are much slower. Nevertheless, a mechanistic connection can be found between the two types of dynamics.

Thursday, 16.05.2024, 1:00 pm

Host: Prof. Dr. Helmut Grubmüller
Dr. Aljaz Godec

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