

Multiscale Motility of Biomolecular Machines

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Abstract:

The living cell contains a large variety of biomolecular machines that use chemical free energy for intracellular transport and remodelling as well as information processing.

In this talk, I will emphasize a bottom-up approach from simple to more complex systems and describe the following directed processes in some detail: free energy transduction of single cytoskeletal motors, cooperative transport by teams of such motors, growth and shrinkage of actin filaments, as well as protein synthesis by ribosomes.

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Room PH 127