

## **Physics of Life Processes**

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Rapid developments in experimental biophysics and molecular biology allow unprecedented quantitative insights into the fascinating world of life processes. This has rekindled the hope that one might be able to uncover some of the design principles of life. The vision is to understand how physical laws govern material properties of cells, the operation of biochemical machinery, and the processing of information in biological systems. In this talk we will discuss recent advances in cellular and system biophysics. Topics will include the physics of active soft materials, intracellular transport, and evolutionary dynamics of bacterial metapopulations.