



NCCR CHEMICAL
BIOLOGY

NCCR LECTURE SERIES

Invited speaker

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Viscoelasticity of cell membranes: from minimal artificial cortices to living cells

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16:15

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About the talk

Underneath the eukaryotic plasma membrane, a thin layer of actin filaments drives pivotal aspects of cell mechanics. Myosin-driven contractility and actin-cytoskeleton membrane interactions are responsible for many fundamental cellular processes. How the interplay between the actin cytoskeleton, the membrane, and actin binding proteins drives these processes is far from being understood. To unravel general principles underlying actin cortex properties, the Janshoff lab has developed a bottom-up in vitro system and compared it with apical cell membranes from living cells as well as living cells subject to various environmental cues.