Westfälische Wilhelms-Universität Münster

Fachbereich Physik

>Allgemeines Physikalisches Kolloquium

> Donnerstag, 29.11.2018 um 16 Uhr c.t.

Prof. Dr. Alexander Rohrbach

Albert-Ludwigs-Universität Freiburg

Novel coherent optical methods for biophysics on the fast and small scale

Many new, exciting imaging techniques have emerged during the last decade, providing significantly improved spatial resolution and contrast. However, this extra information comes at the cost of more photons required to illuminate the target, which requires more time and energy and often damages biological structures. The smaller the structures to be investigated, the faster they usually move inside living cells, because of both Brownian motion and coordinated work of molecular motors. Therefore, alternative imaging approaches based on coherent optics have to be developed.
In this talk, I will demonstrate how nanometer scale displacements and correlated motions of cellular structures can be observed by partially coherent photons, giving novel insights into principles of molecular mechanics of living systems

Kolloquiums-Kaffee ab 16 Uhr vor dem Hörsaal

Wilhelm-Klemm-Straße 10 Institutsgruppe 1

Hörsaal HS 2