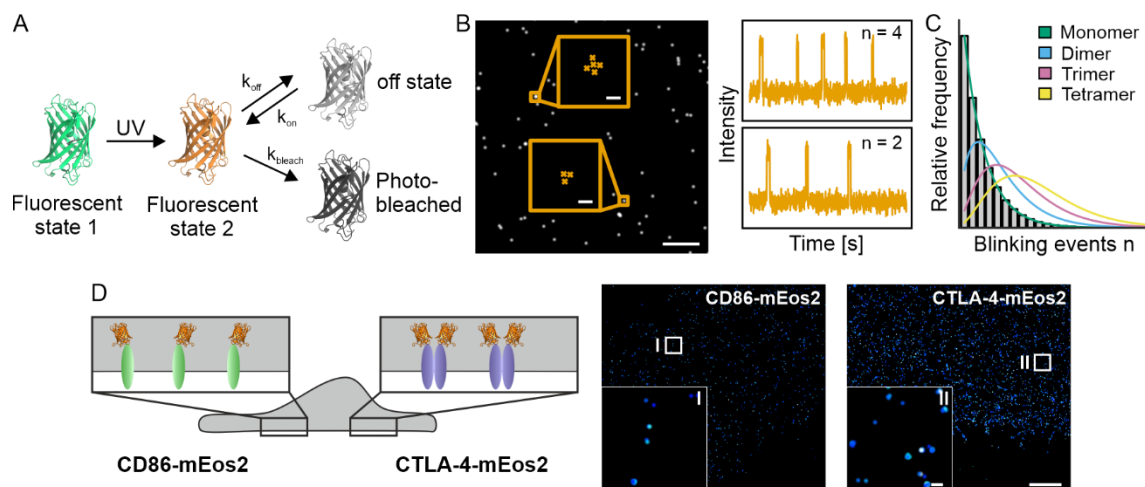


PhD position (E13/65%) – Quantitative super-resolution microscopy of protein complexes

We offer a PhD position in **quantitative super-resolution fluorescence microscopy of protein complexes**. The project aims to apply quantitative single-molecule localization microscopy (qSMLM) to directly measure the stoichiometry of protein assemblies in cells with near-molecular spatial resolution.

Our interdisciplinary research group of chemists, biologists, and physicists is located in the Chemistry Department (FB14), Institute for Physical and Theoretical Chemistry, at the Johann Wolfgang Goethe University in Frankfurt am Main. We work at the interface between biology, (bio)chemistry and physical chemistry, using single-molecule and super-resolution techniques to study cellular processes with molecular resolution (further information at www.smb.uni-frankfurt.de and share.smb.uni-frankfurt.de).

We seek for candidates with a background in biochemistry, chemistry, biophysics, or related disciplines, who are interested to dive in the **exciting research field of applying advanced optical microscopy to cell biology questions**.



Quantitative single-molecule super-resolution microscopy with photoactivated fluorescent proteins. (A) Photophysical transitions in a photoactivatable fluorescent protein lead to multiple detection events for single fluorophores (“blinking”) that (B, C) can be used for molecular quantification with molecular spatial resolution. (D) Quantitative super-resolution imaging revealed monomeric CD86 and dimeric CTLA4 in the plasma membrane of cells (Image taken from Dietz & Heilemann, *Nanoscale* 2019.)

Please send your application by email to

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