

The 90th iCeMS SEMINAR

CeMI Seminar Series 27

Sat 24 Sep 2011

16:00-17:30

The entrance door will be unlocked between 15:30 and 16:30.

Lecturer: **Dr. Helge Ewers**

Group Leader

Group of optical methods in neuronal cell biology

Laboratory of Physical Chemistry at the Chemistry Department

The Swiss Federal Institute of Technology (ETH)

Single Molecule Localization-based Superresolution Microscopy of the Cytoskeleton

Venue: Roof Terrace, 5th Floor of the East Bldg.
Institute for Frontier Medical Sciences
Kyoto University

Novel superresolution microscopy techniques such as PALM and STORM rely on the sequential localization of many fluorophores within the target structure. To what extent and at what resolution individual structures can be resolved depends on the number of localizations that can be achieved within a structure and the number of photons that can be collected from each fluorophore.

So far the technique is limited by a sparse number of photoactivatable proteins and the delivery of organic dyes to the target. Dr. Ewers will present a novel versatile labeling method and investigation results on the interaction between the actin and microtubule cytoskeleton in neuronal cells.

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Hosted by: iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University
Co-hosted by: Center for Frontier Medicine, Global COE Program, Kyoto University

