

SFB  
1078



Protonation Dynamics  
in Protein Function

Mon, Dec. 11,  
2017

15:15 – 17:30

Freie Universität Berlin  
Physics Department  
Lecture Hall B

(Arnimallee 14, 14195 Berlin-Dahlem)

## ➤ Colloquium

➤ **Dr. Renu Batra-Safferling** – Forschungszentrum Jülich, Germany

### ***LOV (Light-Oxygen-Voltage) proteins: Structures, Mechanism and Applications***

Dr. Batra-Safferling's research interests include structural biology, X-ray crystallography, biophysical characterization of the signaling components of the visual signal transduction pathway, protein-ligand interactions using SH3-domain containing proteins, blue-light photoreceptors of the LOV family, natively unfolded proteins, protein aggregation using dynamic light scattering and CD spectroscopy. The primary focus of her research is to understand the structure-function relationships of soluble and membrane proteins of biological importance. Her approach is to conduct these studies with techniques that allow a complete dissection of kinetic and structural properties of the proteins in static and dynamic states.

➤ **Prof. Jasper van Thor** – Imperial College London, UK

### ***Photosynthetic Exciton Dynamics and Charge Separation in Time and Space***

Prof. van Thor's research group works on the structural dynamics of light sensitive proteins, using primarily ultrafast pump-probe techniques. The main experimental methods that are used are ultrafast X-ray crystallography, ultrafast optical crystallography and ultrafast vibrational and visible spectroscopy. The research focuses on developing and using new experimental and also theoretical tools to find real-space information on ultrafast structural processes. Prof. van Thor and his group investigate light sensitive systems, including fluorescent proteins, photosynthesis, and photoreceptor proteins such as phytochromes and the photoactive yellow protein.

Coffee and tea are ready at 15:00 and during the break from 16:15 – 16:30.

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