

SFB  
1078



Protonation Dynamics  
in Protein Function

## ➔ Colloquium

Mon, Dec. 14, 2015 · 16:15 – 18:30 · Lecture Hall B of the Physics Dept.  
at Freie Universität Berlin (Arnimallee 14, 14195 Berlin-Dahlem)

**16:15 Prof. John Christie, University of Glasgow, UK**

***What is LOV? From plant growth to optogenetics.***

Blue light sensing motifs known as the LOV (Light, Oxygen and Voltage sensing) domain are prevalent in plants and bacteria. Prof. Christie will discuss how research on LOV-based photoreceptors in plants has led to the development of new optogenetic tools to non-invasively track bacterial and viral infections, as well as control neural processes by using light.

**17:30 Dr. Tatiana Domratcheva, Max Planck Institute for Medical Research, Heidelberg, Germany**

***Computational studies of photoreceptor flavoprotein BLUF:  
From spectral assignments to understanding functional mechanisms***

Dr. Domratcheva will present her most recent results and conclusions from *ab initio* and molecular dynamics computational studies of the photoactive flavoprotein BLUF, addressing various aspects of its light activation via electron transfer coupled to proton transfer reactions.

Coffee and tea are ready at 16:00 and during the break.

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