

SFB
1078



Protonation Dynamics
in Protein Function

➤ Colloquium

Mon, Nov. 10, 2014 · 16:15 – 18:30 · Lecture Hall B of the Physics Dept.
at Freie Universität Berlin (Arnimallee 14, 14195 Berlin-Dahlem)

16:15 Prof. Thomas Happe,
Ruhr-Universität Bochum, Germany

Electron-proton coupling in the catalytic mechanism of hydrogenases

The features of redox enzymes like [FeFe]-hydrogenases are determined both, by the catalytic cofactor and the surrounding polypeptide environment. Our hydrogenase research is focused on characterizing cofactor architecture and transition states during the catalytic turnover process as well as on the multiple influences of the protein framework. In my talk I will present the most recent results on the influence of single amino acids for proton and electron transfer within [FeFe]-hydrogenases.

17:30 Prof. Klaus-Peter Hofmann,
Charité – Universitätsmedizin Berlin

Precision and flexibility in G protein-coupled receptor function

The Rhodopsin and the b₂-adrenergic receptor are well-studied examples of G protein-coupled receptors. X-ray structures of their active, G protein-activating state show one well-defined seven transmembrane (TM) bundle. However, the active receptors (RhR* or b₂-AR*) in the native membrane display a variety of conformations. We have investigated how this conformational repertoire relates to the X-ray structure and how it controls coupling to G protein and arrestin.

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

www.sfb1078.de