

Donnerstag, 08.05.2014

Hörsaal **E**, Chemie Zentralbau, **13:15 Uhr**

Sprecher: **Ulrich Steiner**
Universität Konstanz

Thema: **Introduction to spin chemistry**
(Studentischer Vortrag)

Abstract: For chemists, the conceptual difficulty in understanding spin- and magnetic-field effects on radical pairs is typically due to the primitive picture of an electron spin state being restricted to two possibilities: spin-up (α) and spin-down (β). This seems to preclude the possibility of a full 3D freedom of spin orientation even for spin 1/2 particles. It is shown how this problem can be overcome using the concept of the Bloch-sphere and how the motion of individual spins and pairs of spins under the effect of internal and external fields can be visualized. Furthermore, an introduction to the principles and mechanisms of coherent and incoherent spin motion will be given.

Organisation: *C. Lambert*