

Einladung zu einem Kolloquium

Datum/Zeit: **Dienstag, 21.05.2024, 16.45 Uhr**

Referent: **Prof. Peter Hore (Doktorandenwahlsprecher)**
University of Oxford, Oxford, United Kingdom

Titel: *Avian magnetoreception – a radical sense of direction?*

Ort: **HCI G7**

Small migratory songbirds are extraordinary navigators: weighing less than 30 g, they fly thousands of kilometres between their breeding and wintering grounds, alone and at night, ultimately with centimetre precision. To do this they use the sun and the stars, olfaction and landmarks but it is clear that they can also perceive the direction of the Earth's magnetic field. Despite more than 50 years of research, the biophysical mechanism of this remarkable magnetic sense remains obscure. In this lecture, I will discuss the proposal that the birds' magnetic compass relies on a quantum mechanism in their eyes. Specifically, the unique properties of light-induced radical pairs in cryptochrome proteins in photoreceptor cells could allow chemical sensing of magnetic interactions orders of magnitude weaker than previously thought possible.

Gäste sind willkommen