

**Invitation to a Guest Lecture  
at the joint colloquium of the Institute of Biology and Environmental Sciences and the  
Department of Neuroscience**

**Module bio890: Current topics in biology**

**Joseph Wynn**

University of Oxford, Department of Zoology, UK and  
Institute of Avian Research, Wilhelmshaven

**The sensory and cognitive basis of natal homing**

The ability to return precisely to a breeding site, often following long-distance migration ('philopatry'), is both remarkable and unsolved. Here, using historic ringing data gathered from across Europe over the last century I investigate the sensory basis of natal philopatry in both songbirds and seabirds. I find evidence for natal imprinting to the Earth's magnetic field prior to first migration, with magnetic inclination specifically used to target the natal site over extremely long distances after (in some cases many years) have elapsed. I speculate as to how magnetic cues combine to give an indication of natal site position in 2 dimensions, and discuss how ringing data might be used to investigate avian navigation more generally.

**23.11.2021, 4 pm (s.t.)**

**virtual room: <https://meeting.uol.de/b/gab-t5m-nmo-kvi>**

Host: Prof. Dr. Miriam Liedvogel (Behavioural Genomics), IBU / Institute of Avian Research, Wilhelmshaven

Members of all institutes are cordially invited to join the lecture.