

# PhD Position in orientation behaviour of migratory songbirds

Institute of Avian Research “Vogelwarte Helgoland”, Wilhelmshaven, Germany

A PhD position in orientation behaviour of migratory songbirds is available at the Institute of Avian Research “Vogelwarte Helgoland”, a non-university research centre in the portfolio of the Lower Saxonian Ministry of Science and Cultural Affairs. The position runs from January 2019 to December 2022 and is funded by the German Research Foundation (DFG) within the recently approved collaborative research centre (SFB 1372: “*Magnetoreception and navigation in vertebrates: from biophysics to brain and behaviour*” hosted by the University of Oldenburg).

The PhD position will be embedded within a larger collaborative group comprising 16 principle investigators, 5 postdocs and 16 PhD students mainly based at University of Oldenburg but with partners at Institute of Avian Research Wilhelmshaven, Ruhr University Bochum, Caesar Bonn, Max Planck Institute for Evolutionary Biology Plön, University of Oxford, England, and Weizmann Institute of Science Tel Aviv, Israel. You will become part of a large team working closely together on related questions and you will have access to a very wide range of superb modern equipment, techniques and expertise. You will be further provided with exceptional opportunities for interdisciplinary collaboration and academic networking, together with structured training, scientific exchange and early career support programs. More details about the SFB can be found at [www.sfb1372.de](http://www.sfb1372.de).

The aim of the PhD project (sub-project Nav02: “Assessing magnetoreception and navigation-hypotheses in free flying birds”) is to conduct an extensive field experiment with free-flying migratory songbirds on the island of Helgoland in the North Sea for four years and to test the mostly discussed hypotheses of magnetoreception by manipulating the radical-pair and/or the magnetic-particle-based mechanism in birds. Birds will be exposed to treatment in cages and their immediate free-flight response will be radio-tracked by digital radio-telemetry stations.

## Main responsibilities

- conducting field experiments on Helgoland from early August to end of November during four years,
- analysing highly complex radio-tracking data derived from a large-scale array of multiple radio receiving stations (location estimates based on bi-/triangulation),
- statistical analyses of complex and large data sets (including circular data),
- tight collaboration with other scientists of the collaborative research centre and
- writing scientific publications

## Applicant's profile

We seek a smart and highly motivated student with

- a university degree in a relevant discipline with specialization in behavioural ecology, ornithology, orientation/navigation,
- experience with ornithological field work, including ringing, preferably with songbirds,
- high motivation for intensive field work on Helgoland from early August to end of November each year,
- strong experience with the statistical software R (including modelling and programming!),
- interest in orientation/navigation and movement ecology questions,
- ability to work both independently and creatively and as part of a team and
- excellent oral and written communication skills in English

**Position**

The position is available from January 2019 to December 2022 and paid according to TVL E13 (<http://oeffentlicher-dienst.info/tv-l/west/>) with 65% of the regular work hours. The place of work will be at the institute's headquarters in Wilhelmshaven and on Helgoland. Regular meetings with members of the SFB 1372 will be held at the University of Oldenburg.

The Institute of Avian Research is an equal opportunity employer, determined to increase the proportion of women in successful scientific careers. If equally qualified, disabled applicants will be preferably considered.

Applicants must send **a single pdf file** via e-mail containing a cover letter with statement of motivation, CV, list of publications, concise statement of research interests, the names and addresses of at least three professional referees, and copies of transcripts and degree certificates **by 10 December 2018** to [heiko.schmaljohann@ifv-vogelwarte.de](mailto:heiko.schmaljohann@ifv-vogelwarte.de). We will start looking at the applications as soon as they are submitted and will consider further applications until the position is filled. For further questions contact PD Dr. Heiko Schmaljohann per e-mail or phone (+49 4421 9689 39). For details on the application process please refer to [www.sfb1372.de/jobs](http://www.sfb1372.de/jobs).