An exciting opportunity has become available for a fully funded

PhD position in Human Cognitive Neuroscience of Action (for 3 years)

in the Freigeist research group "Motor Learning"

led by Dr Max-Philipp Stenner at the [Leibniz Institute for Neurobiology](#) and Department of Neurology in Magdeburg, funded by the Volkswagen Foundation.

Our lab

[Our lab](#) is fascinated by the question **how motor control and perception interact** for **motor learning**, and how our **subjective experience of action and control** emerges from this interaction. To address these questions, our lab uses a combination of **psychophysics, motor learning paradigms**, and **non-invasive and invasive human electrophysiology**, mostly in healthy individuals, but also in neurological as well as psychiatric patients.

What we offer

The Leibniz Institute for Neurobiology (LIN) has a long tradition of **world-leading research on learning and memory**, both in animals and humans. The Motor Learning Group at the Leibniz Institute has first-rate access to Magdeburg's **excellent, state-of-the-art facilities for non-invasive human electrophysiology and neuroimaging**, including MEG, EEG, 7T, 3T MRI (all on the same campus). All facilities are supported by expert IT and physics staff. In addition, a very close collaboration exists with the Departments of Neurology and Stereotactic Neurosurgery (same campus) which allows for **systematic invasive electrophysiology in humans** and, more generally, **studies in clinical populations**. Furthermore, our group is using a **KINARM End-point lab** for measuring and manipulating kinematics & dynamics during reaching movements. The Motor Learning Group is part of Magdeburg's newly funded Collaborative Research Center 1436 "Neural Resources of Cognition". The Leibniz Institute and Department of Neurology, together with several other neuroscience institutes on the same campus, provide a **vibrant, international, highly inspiring, friendly and supportive research environment**. Dr Stenner's lab holds weekly lab meetings, in addition to regular department and institute meetings, and provide a **supportive, aspiring, and friendly atmosphere**. Magdeburg is a growing, intriguing city with lots of activities beyond work (second greenest city in Germany) and a strong, friendly academic community.

We offer:

- **A young, interdisciplinary & international team.**
- **Flat hierarchies & strong early career support.**
- **State-of-the-art research facilities, including MEG and 7 T MRI scanner.**
- **Methodological support by leading experts.**
- **No obligation to teach (but possible if desired).**
- **Possibility to present data at several national and international conferences.**

Your tasks

The successful candidate will design, conduct, analyse and publish experimental studies into **mechanisms and functions of predictive motor control**. This entails designing and conducting studies that combine elegant behavioural paradigms (including KINARM experiments) with MEG/EEG, with an option for additional invasive electrophysiological recordings in humans (patients).

Qualities we are looking for

We are looking for a highly motivated, team-minded scientist with a **strong interest in the psychology and neuroscience of motor control/motor learning and perception**, as well as a high degree of scientific creativity, passion, and rigor. **Demonstrable experience with MEG or EEG is essential**, as well as **demonstrable experience with psychophysical analyses or other human behavioral experiments**. Good programming skills (in particular **MatLab**; in addition, Simulink, C, Python, Presentation would help) as well as solid statistical skills and high proficiency in spoken and written English are mandatory. Suitable candidates should hold a Master's degree in neuroscience, physics or engineering (with a previous focus on neuroscience), psychology, biology, or related. We are looking for ambitious candidates who aim for a career in academia, for which we will provide ample support.

Terms & conditions

The position is for three years. A preferable starting date is April or May 2021, subject to negotiation. The position will remain open until filled. Salary is based on TV-L E 13 (65%, i.e., basic salary (gross) around 2650,- euros/month).

How to apply

The application should include the following documents (in a single PDF-file): 1) Cover letter (max 1.5 pages) providing a brief description of previous and current research work and achievements, research interests and, **importantly, motivation to enter this particular project** and pursue a career in academia; 2) Curriculum vitae, including a list of publications; 3) contact details of two scientists who can provide references.

The application deadline is **March 10th 2021**. Please email this PDF file to

max-philipp.stenner@med.ovgu.de

by that deadline. Should you require any further information, please contact Dr Max-Philipp Stenner.