

## Doctoral Researcher in Cognitive Psychology/Cognitive (Neuro-)Science (m, f, d)

(Salary grade E 13 TV-L, 65%)

Chemnitz University of Technology invites applications for a doctoral position in the **Collaborative Research Centre (CRC 1410) Hybrid Societies – Humans Interacting with Embodied Technologies**. Employment is offered until December 31<sup>st</sup>, 2023 starting April 1<sup>st</sup>, 2020.

**Research Environment and Tasks:** Research in the CRC 1410 Hybrid Societies pertains to the interaction with Embodied Digital Technologies (EDTs) as artificial bodies moving in real or virtual environments ([www.hybrid-societies.org](http://www.hybrid-societies.org)). Interdisciplinary research in the CRC is guided by two leading questions to ultimately ensure smooth and efficient encounters between humans and embodied technologies in hybrid societies: What is required so that humans can coordinate with EDTs as smoothly as with conspecifics? How to design EDTs to meet these requirements? Cooperating researchers from psychology, engineering, computer science, human movement science, linguistics and gesture studies, sociology, law studies, physics, and mathematics scientifically inquire the interaction of humans with EDTs from the level of single actions up to the attribution of intentionality.

In project **Spatial Orientation in Telepresence**, spatial cognition research and virtual reality engineering are combined to clarify and ensure prerequisites of effortless spatial updating in synthetic environments. By means of embodied digital technologies, humans can move in synthetic environments that encompass virtual but also remote environments experienced through technology (telepresence and telemanipulation). If the body moves in the environment, representations of where other bodies and objects are relative to the own body have to be updated. Preserving spatial orientation by effortless, continuous spatial updating requires sensory experiences capable of triggering updating mechanisms. The main question addressed in this project is how best to induce the necessary sensory experiences for supporting continuous spatial updating to preserve spatial orientation in synthetic environments (e.g., in teleoperation).

The successful applicant will be responsible for setting up, conducting, and reporting behavioural experiments in virtual reality settings as part of a research team.

Researchers in the CRC Hybrid Societies contribute to the CRC's joint research activities and actively participate, for instance, in research colloquia, lecture series, and workshops. The doctoral position includes the enrollment in the CRC's doctoral program.

### Requirements:

- University degree (Master/Diploma or equivalent) in Psychology, Cognitive Science, or a similar background
- Expertise in Cognitive and Experimental Psychology
- Expertise in Spatial Cognition and Cognitive Neuroscience is a plus
- Strong motivation for contributing to science in interdisciplinary collaboration
- Fluent in English (both written and spoken)

### Application procedure:

Applicants should send their complete application documents including a motivation letter (1 page) with a brief description of personal qualifications and research interests, a tabular curriculum vitae, copies of degree certificates and academic transcripts, a publication list if applicable, and abstracts of Bachelor- and Master-/diploma theses (1-2 pages) preferably as a single pdf-file via email (stating: "CRC1410\_C02\_psych") to [georg.jahn@psychologie.tu-chemnitz.de](mailto:georg.jahn@psychologie.tu-chemnitz.de). The closing date for applications is **February 12<sup>th</sup> 2020**. Please, do not include links in electronic applications. Please, send copies only. Original documents will not be returned.



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Chemnitz University of Technology is committed to ensuring an environment that provides equal opportunities and promotes diversity. To increase the number of women working in science and teaching, applications by women with the required qualifications are explicitly desired. Persons with disabilities are encouraged to apply. They will be given preference if equally qualified.

Employment will be governed by the provisions of the German law on fixed-term contracts in academia (Wissenschaftszeitvertragsgesetz).

Information on the collection and processing of personal data is provided at  
[https://www.tu-chemnitz.de/verwaltung/personal/public/Datenschutz/dse\\_dp.html](https://www.tu-chemnitz.de/verwaltung/personal/public/Datenschutz/dse_dp.html)