The University Medicine / Clinical Neurophysiology Göttingen (Germany) is seeking a

# PhD Student (Doktorand)
# on Multi-Modal Imaging Integration

in the framework of two DFG-funded, third-party projects.

The successful applicant will work primarily on **integrating functional and structural connectivity in MEG/EEG, MRI and FDG-PET** in patients with **epilepsy**. This involves **graph-theoretical concepts** and **machine learning** approaches. The aim of this project is to link the causes of epilepsy with imaging patterns and improve our understanding of the pathophysiology, genotype-phenotype relations and multimodal imaging in general.

Applicants need a university degree (MA/MSc or equivalent) in physics, mathematics, biology, (bio-)medical engineering, theoretical medicine or other related disciplines. **Programming skills** (Matlab) are essential as is previous knowledge of **MEG/EEG, MRI and/or FDG-PET** and common **imaging toolboxes** (e.g. Fieldtrip, Brainstorm, SPM, FSL). **Machine learning** experiences, e.g. use of neural networks, and previous experience with epilepsy are beneficial. The applicant has to be fluent in English, both written and oral. German language skills are advantageous, but not a prerequisite.

The applicant can be enrolled in the "Systems Neuroscience" or "Computational Neuroscience"/GGNB program of the University (https://www.uni-goettingen.de/en/265943.html).

The focus of our group is the utilization of imaging and post-processing methods to better understand the neurobiology of focal and generalized epilepsies allow individualized diagnostics and translate methodological advances into clinical applications.

The salary is according to German federal scale (TV-L, E13 50%). The initial contract is for one year. After successful interim evaluation by the thesis advisory board, a prolongation for further two years is available. The university is especially encouraging the application of women. Disabled applicant are preferred in case of equal qualification. The intended start date is September 2018 with some flexibility.

Please send a letter of motivation, CV, references and, if available, a sample publication to:

Universitätsmedizin Göttingen
Klinik für Klinische Neurophysiologie
Prof. Dr. Niels Focke
Robert-Koch Str. 40
Deutschland/Germany
or via E-Mail: niels.focke@med.uni-goettingen.de