



Centro de Investigación  
Mente, Cerebro y  
Comportamiento

## **Postdoc position for 3 years at the Berlin Mobile Brain/Body Imaging Lab (Prof. Gramann) at TU Berlin, Germany**

23/09/2016

### Empleo

A position as a Postdoctoral Researcher is available to be filled starting December 2016 to work on human brain dynamics during active physical navigation using synchronized electroencephalography, motion capture, and head-mounted virtual reality.

Postdoc position for 3 years at the Berlin Mobile Brain/Body Imaging Lab (Prof. Gramann) at TU Berlin, Germany

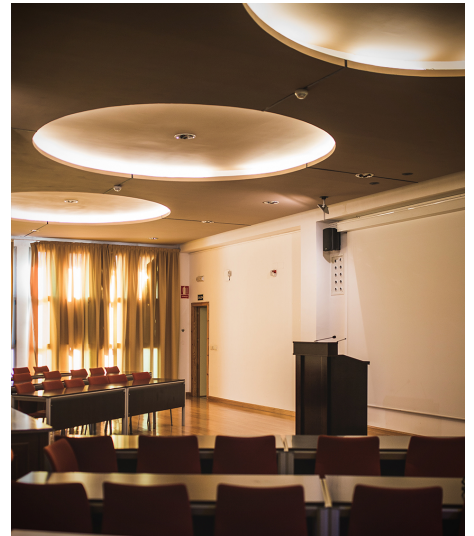
A position as a Postdoctoral Researcher is available to be filled starting December 2016 to work on human brain dynamics during active physical navigation using synchronized electroencephalography, motion capture, and head-mounted virtual reality. The research focuses on investigating the neural dynamics accompanying active physical rotation and translation in space. Underlying research questions concern where and how movement-related idiothetic information is represented in the human brain and how it is used during spatial navigation.

The position is part of an international and interdisciplinary team working on Mobile Brain/Body Imaging (MoBI) at the Berlin Mobile Brain/Body Imaging Labs (BeMoBIL). For more information on the lab and research projects please visit:

<http://bemobil.bpn.tu-berlin.de/>

Applicants should possess a Ph.D. in Biomedical Engineering, Neuroscience, Physics,

<http://cimcyc.ugr.es/>



Psychology or related field. Strong signal processing skills are required including substantial programming skills in MATLAB. Research experience with locomotion and biomechanical models is desirable. Experience with EEG analyses using EEGLAB is helpful.

The location will be Berlin, Germany.

For information about related projects, see the following journal papers:

Imaging natural cognition in action

K Gramann, DP Ferris, J Gwin, S Makeig

International Journal of Psychophysiology 91 (1), 22-29

Cognition in action: imaging brain/body dynamics in mobile humans

K Gramann, JT Gwin, DP Ferris, K Oie, TP Jung, CT Lin, LD Liao, ...

Reviews in the Neurosciences 22 (6), 593-608.

Human brain dynamics accompanying use of egocentric and allocentric reference frames during navigation

K Gramann, J Onton, D Riccobon, HJ Mueller, S Bardins, S Makeig

Journal of cognitive neuroscience 22 (12), 2836-2849

Embodiment of spatial reference frames and individual differences in reference frame proclivity

K Gramann

Spatial Cognition & Computation 13 (1), 1-25

Removal of movement artifact from high-density EEG recorded during walking and running

JT Gwin, K Gramann, S Makeig, DP Ferris

Journal of neurophysiology 103 (6), 3526-3534.

Visual evoked responses during standing and walking

K Gramann, JT Gwin, N Bigdely-Shamlo, DP Ferris, S Makeig

Frontiers in human neuroscience 4, 202 \_\_\_\_

Prof. Dr. Klaus Gramann Biological Psychology and Neuroergonomics Berlin Institute of Technology

International Faculty Center for Advanced Neurological Engineering University of California, San Diego

Tel: +49.(0)30.314.25292 Fax: +49.(0)30.314.25274

homepage: [www.bpn.tu-berlin.de](http://www.bpn.tu-berlin.de)

Mail address:

Technische Universität Berlin

Institut für Psychologie und Arbeitswissenschaft FG Biopsychologie und Neuroergonomie Sekr. MAR 3-2 Marchstraße 23 D-10587 Berlin Germany