PhD position

A PhD position (2+1 years) will be available at the <u>Neural Dynamics of Visual Cognition Lab</u> of <u>Dr.</u> <u>Radoslaw Cichy</u> at Free University Berlin, Germany. Preferred starting date is autumn 2017.

Project description

The overall goal of the PhD project is to provide a better understanding of the transformation between sensory to semantic representations in the human brain. The first sub-goal is to map the spatiotemporal neural dynamics during the perception of visual and auditory stimuli. The second sub-goal is to clarify when and where in the neural processing cascade abstract representations emerge that are independent of the sensory modality.

The main methods to be applied are functional magnetic resonance imaging (fMRI) and electroencephalography (EEG). Psychophysical experiments and computational modelling will be used to further investigate the format in which those representations are encoded.

The position is funded by the German Research Foundation (Emmy Noether research grant), salary group 13 TV-L 65%.

Requirements

- Master degree in Psychology, Cognitive Science, Neuroscience, Biology, Computer Science or related disciplines with excellent results
- Experience with acquisition and analysis in either one or both imaging methods (fMRI, EEG)
- Fluency in English

Desirable

- Programming skills, preferably in Matlab or Python
- Familiarity with topics in visual neuroscience or auditory neuroscience
- Experience with analysis of neuroimaging data with standard programs (e.g. freesurfer, SPM)
- Experience with multivariate analysis methods (decoding or representational similarity analysis)

For informal inquiries contact me at <u>rmcichy@gmail.com</u>. Applications, together with relevant documentation (CV, a brief statement of research interests, and the names and contact details of two academic references) quoting the reference code "12-40/2017" should be received no later than June 13th, 2017 at <u>a.gulka@fu-berlin.de</u>.

Dr. Radoslaw Cichy Neural dynamics of visual cognition group Department of Education and Psychology Free University Berlin Berlin, Germany rmcichy@gmail.com