



PhD positions in Computational Neuroscience in the Tchumatchenko group at the University of Bonn

The Tchumatchenko Group is seeking highly motivated PhD candidates to conduct research in the field of computational neuroscience. We work at the intersection between mathematics and biology and use both pen-and-paper calculations as well numerical simulations and data analysis methods. The choice of the methods is driven by the topic at hand which is often a question related to the circuit-level function of neural networks and synaptic dynamics. Our group is one of the leading computational neuroscience teams in Europe and obtained competitive prizes and third-party funding from several funding sources and has a track record of successful theses and research papers completed by mathematics/physics students that did not have prior exposure to biology.

The projects you could work on could focus on a mathematical study of multiple attractors, time series analysis, numerical fitting procedures or involve tool development in python for the analysis of neural activity data. On the most applied end, machine learning applications to image segmentation (mRNA and protein) and analyses of behavioral tracking data are conducted in our group. The ideal candidate will be a highly motivated, team-oriented graduate interested in either pen-and-paper calculations, numerical algorithms or machine learning applications. Candidates should be enthusiastic about working and learning in an interdisciplinary research team in which members come from diverse scientific backgrounds.

Good communication skills, a strong work ethic, excellent command of the English language are essential. Please send your application with a cover letter, a CV, copies of all relevant degree certificates to tatjana.tchumatchenko@uni-bonn.de.

All salaries according to the public German salary scale. Start date negotiable.

Information about our group can be found here: www.tchumatchenko.de

We are looking forward to your application!