Job Announcement

The University of Potsdam was founded in 1991 and has firmly established itself within the scientific landscape and developed into an outstanding economic factor and growth engine for the region. The university excels in acquiring third-party funds, has received multiple teaching awards, has a very service-oriented administration, and has been honored several times for its family-friendly culture. About 20,000 students and 3,000 employees study and work at three campuses – Am Neuen Palais, Griebnitzsee and Golm – at one of Germany's most scenic institutions of higher education.

The **University of Potsdam, Faculty of Human Sciences, Department of Psychology, Cognitive Sciences Unit** invites applications for the following position at the **Cognitive Neurosciences Lab (**led by **Milena Rabovsky)** limited to 3 years, to be filled as soon as possible**:**

PhD student position (f/m/d)

ID no. 322/2026

The successful candidate will work 30 hours per week (75 %, this a common arrangement for PhD positions in Germany*).* The position is classified within remuneration group 13 of the collective wage agreement among the German federal states ("Tarifvertrag für den öffentlichen Dienst der Länder" – TV-L). The fixed term of employment is in accordance with Section 2 subsection 1 of the German Act on Fixed-Term Employment Contracts in Science and Academia (Wissenschaftszeitvertragsgesetz or WissZeitVG).

This PhD position is funded as part of the project *"Interpretable Surprisal: Language Models Between Linguistic Structure and Neural Evidence" (PIs Alessandro Lopopolo and Milena Rabovsky)*, within the DFG Priority Programme SPP 2556 *"Robust Assessment & Safe Applicability of Language Modeling: Foundations for a New Field of Language Science & Technology"* (LaSTing, https://www.lasting-spp.org/).

Your Field of Work:
The project investigates the relationship between language model–derived surprisal measures and human language processing, combining EEG data, reading time measures, and linguistic analyses of semantics and syntax.

The Scope of Your Responsibilities:
The aim of this project is to investigate the cognitive plausibility of language model–derived surprisal as a measure of human language processing. In particular, it examines how surprisal relates to linguistic structure (syntax and semantics) and to human behavioral and neural data (e.g., EEG). A central goal is to determine to what extent the relationship between surprisal and human responses is mediated or modulated by underlying linguistic information.

The successful candidate will contribute to the development and analysis of computational language models, including training and evaluating models and deriving surprisal-based measures. They will design and implement experiments combining model-based predictions with human data, including the collection of EEG data and behavioral measures (e.g., reading

times). Responsibilities include preprocessing and analyzing EEG data, as well as conducting advanced statistical analyses linking linguistic, computational, and neurocognitive variables. The position also involves working with large-scale datasets and computational infrastructure (e.g., HPC systems) and collaborating within the project and the broader SPP network.
Further responsibilities include interpreting and integrating results across computational, linguistic, and neurocognitive levels, presenting findings at international conferences, and publishing in peer-reviewed journals.

Your Qualifications:

- Very good Master's degree in a relevant field (e.g., Cognitive Science, Cognitive Neuroscience, Computational Linguistics, or related disciplines)
- Strong programming skills (e.g., Python, MATLAB, R), including familiarity with machine learning frameworks (e.g., PyTorch)
- Experience with and interest in neuroscientific methods (preferably EEG)
- Excellent skills in advanced statistical analyses
- Excellent writing, communication, and presentation skills in English
- Strong interest in the lab's research focus, including cognitive neuroscience, language processing, prediction, and event-related brain potentials (ERPs)
- High motivation and commitment

We are also looking for the following competences:

- Experience in training and evaluating language models
- Familiarity with NLP tools and libraries (e.g., tokenizers, parsers such as spaCy, Stanza, or similar)
- Familiarity with linguistic theory (e.g., syntax, semantics, or formal linguistic frameworks)
- Familiarity with working on servers and high-performance computing (HPC) environments
- Experience in research on language processing, prediction, or related cognitive processes

What We Offer:

As a university, we combine the strong potential for development of a teaching and research institution with the attractive working conditions of the public sector. The University of Potsdam is a reliable employer that supports its employees with a variety of offers and benefits:

- Make the most of the various continuing education and networking opportunities offered by the University of Potsdam to refine your subject-specific and interdisciplinary competencies for professional as well as personal growth.
- All campuses have good transport connections. You can receive a monthly subsidy for the public transport job ticket and use our campus bicycles.
- Benefit from a company pension scheme, a special annual payment, and capital-forming benefits.
- Take advantage of the various offers from our Occupational Health Management unit as well as the Academic Sports Center.
- To improve employees' work-life balance, the University of Potsdam offers family-friendly flexible working hours and a defined share of remote working hours (e.g. work from home).
- You have 30 vacation days per year (with a 5-day week) and are also exempt from work on December 24 and 31.

You can find more information about working at the University of Potsdam at https://www.uni-potsdam.de/en/arbeiten-an-der-up/employer-up/overview

For further information about this position, please contact Dr. Alessandro Lopopolo by e-mail: lopopolo@uni-potsdam.de.

Your Application:
Please send your application (including **ID nr. 322/2026**, letter of motivation, CV, at least 1 name of a potential referee, copies of academic certificates) as a single pdf file to Alessandro Lopopolo at lopopolo@uni-potsdam.de until **June 30, 2026** for full consideration (late applications may be considered until the position is filled).

The University of Potsdam values the diversity of its community and pursues the goals of equal opportunity regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity. Applications from abroad and from persons with a migration background are expressly encouraged. The university strives for a balanced gender ratio in all employment groups; in areas where women are underrepresented, women are given preference in case of equal suitability (Section 7 paragraph 4 of the Brandenburg Higher Education Act). People with disabilities are given preferential consideration in case of equal suitability. In aptitude tests and selection interviews, individual compensation measures for disadvantages are granted, taking the specific disability into consideration. If a person with a disability would like to make use of individual compensation measures, please state this in the application letter.

May 20, 2026