Postdoctoral position in Psychometrics and Mathematical Psychology (m/f/d; E13 TV-L, 100%)

Faculty of Economics and Social Sciences, Methods Center, working group of Prof. Dr. Augustin Kelava and Dr. Stefano Noventa

Application deadline : 31.01.2021

In the context of a recently funded DFG Project, the Methods Center is looking for highly skilled and motivated individuals to join our research group. This

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is to be filled ideally in the first half of 2021. The position is funded for 3 years. Funding for equipment, travel, and other expenses is also available. Researchers interested in the intersection of psychometrics, statistics, and mathematical psychology are encouraged to apply. The position is to investigate the generalization of the fundamental assumption of Local Stochastic Independence by means of the integration of methods from Item Response Theory (IRT) and Knowledge Space Theory (KST). The DFG funded project aims at investigating whether an integrated KST-IRT approach can be used to formally systematize and investigate the different forms of local dependence and the different - and often unlinked - approaches that can be found in the Psychometrics and Mathematical Psychology literature. From an applied perspective, the project aims at implementing estimation procedures for the KST-IRT models in the open source R framework.

Responsibilities include

- Conduct both theoretical and applied research on the topic in collaboration with the PI (Dr. Noventa Stefano) and the other members of the project research team: Prof Dr. Augustin Kelava, Prof. Andrea Spoto, Prof. Dr. Jürgen Heller, Dr. Florian Wickelmaier.
- Implementation of the procedures, data analysis, writing papers, and presenting at scientific conferences.

- Supervise and mentor student projects.
- Help to organize and conduct collaborations with our colleagues in the university as well as internationally.

Requirements

- Ph.D. in Psychometrics, Mathematical Psychology or a related Statistical, Mathematical, and Social and Behavioural Sciences field.
- Publications in peer-reviewed journals.
- Highly skilled in at least IRT or KST techniques, preferably both.
- Strong familiarity with R programming language is needed, knowledge about package creation and development is a plus.
- Strong command of English.

Who we are

The Methods Center is a newly founded institute at the Faculty of Economics and Social Sciences at the Eberhard Karls University of Tübingen. The Methods Center supports basic methodological research (methods development). It is engaged in interdisciplinary cooperation and exchange in this field. It is intended to be a platform for quantitative and qualitative method research, as well as theoretical method reflection. Part of this task is to create an interdisciplinary, multi-methodical discourse in which the potentials and limitations of the approaches are discussed. The Methods Center acts as a bridge between research structures at the University of Tübingen (and beyond). This includes particularly the integration into research projects that require method development in the social and behavioral sciences.

Your application

Please send your application as **a single pdf document** in English (cover letter, academic CV, copies of degrees and transcripts with translations if applicable, and contact information for at least two references) electronically to Dr. Stefano Noventa at the secretariat of the Methods Center (office@mz.uni-tuebingen.de). Applications arriving **before January 31, 2021** will receive full consideration. The University of Tübingen seeks to raise the number of women in research and teaching and therefore urges qualified women to apply. Equally qualified applicants with disabilities will be given preference. The employment will be carried out by the central administration of the University of Tübingen.

Online version

https://uni-tuebingen.de/universitaet/stellenangebote/newsfullview-stellenangebote/article/postdoctoral-position-in-psychometrics-and-mathematical-psychology-m-f-d-e13-tv-l-100/

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