Job Announcement

Young, modern, and research orientated... the University of Potsdam has firmly established itself within the scientific landscape since its founding in 1991. Nationally and internationally renowned scientists teach and perform research here at Brandenburg's largest university. The University of Potsdam is successful in acquiring third-party funds, delivers outstanding performance in technology and knowledge transfer, and has a very service-oriented administration. With about 21,000 students studying at three campuses – Am Neuen Palais, Griebnitzsee and Golm – the University of Potsdam is a prominent economic factor and engine of development for the region. The University of Potsdam has a total of over 3,000 faculty and staff members and is located in one of Germany's most scenic areas.

The University of Potsdam, Institute of Mathematics, Applied geometry and topology invites applications for the following two positions subject to funding commitment:

**Academic Staff Member**
**(PhD Positions)**

Requisition No.: 352/2020

The position is available from August 01, 2020. The salary is determined by the collective bargaining agreement for public employees in Germany (TV-L 13 Ost). The position is for 30 hours per week (75% of a full-time contract). This is a temporary position limited until 30.6.2024 in accordance with Section 2 subsection 1 of the Academic Fixed-Term Contract Law (WissZeitVG).

These PhD positions are funded by the Discretization in Geometry and Dynamics (https://www.discretization.de/) Collaborative Research Centre funded by the Deutsche Forschungsgemeinschaft, examining the use of discrete geometric models in a variety of contexts.

While there is a large literature selection (in biophysics, biochemistry, molecular biology) on molecular dynamics simulations of protein behaviour, larger-scale processes of interest require a more coarse-grained description of the proteins. These projects will explore the question whether such assembly processes can be explained via geometry-based models, in particular implementing a geometry-based simulation technique.

The research of the group of Applied Geometry and Topology uses geometric and topological techniques in the study of soft and biological materials, both theoretically and computationally. The project will be interdisciplinary and combine geometric models with some basic statistical physics and structural biology. Collaboration within the Collaborative Research Centre is expected, in particular with project collaborators at TU Munich.

**Qualifications**
- Completed academic studies at an institute of higher learning
- Master degree in mathematics or a related discipline
- Highly motivated
Requirements:
Applicants should have experience with either differential or computational geometry, as well as basic experience with simulation and programming. Working knowledge of English is required.

Under the laws of the federal state of Brandenburg, employees under this contract are permitted to dedicate at least 33% of their contract time for their scientific qualification.

The University of Potsdam aims to increase the proportion of women in research and teaching and therefore invites qualified applicants to apply. The University of Potsdam values the diversity of its members and pursues the goals of equal opportunities regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, sexual orientation or identity. In the case of equal suitability, women within the meaning of Section 7 (4) BbgHG and severely disabled people will be given preferential consideration. Applications from abroad and from persons with a migration background are expressly welcome.

Applicants should send their application materials, by July 15th, 2020 at the latest, by email to Prof. Dr. Myfanwy Evans, Institute of Mathematics, Applied geometry and topology, myfanwy.evans@uni-potsdam.de with the subject line, “Job Title – Requisition No.: 352/2020

Further information can be obtained from Prof. Myfanwy Evans, Email: myfanwy.evans@uni-potsdam.de.

Potsdam, June 30, 2020