



30.08.2018

The Zuse Institute Berlin (ZIB) is a non-university research institute under public law of the state of Berlin. The department Visual Data Analysis is offering a

research position (f/m)
reference code: WA 47/18
pay grade E 13 TV-L Berlin (75%).

The position is offered starting at the earliest possible date and will be a fixed-term contract for 2 years with the option to be extended.

Tasks

The task is to develop methods of data visualization for the identification and visualization of spatiotemporal structures, to achieve a better understanding of multi-scale phenomena that occur during the formation of cyclones. This includes in particular the development, implementation and testing of interactive methods

- for defining (formally and with visual support) spatiotemporal structures,
- for extracting such structures from large spatiotemporal data,
- for comparing multiple time-dependent fields – quantitatively and structure-based

and the use of these methods to compare data from asymptotic analysis, high-resolution simulations, and meteorological observations.

The work is part of the DFG Collaborative Research Center 1114 "Scaling Cascades in Complex Systems", which has been established at the Free University of Berlin and aims to investigate multiscale phenomena. Subproject C06 "Multi-scale structure of atmospheric vortices" seeks to model the complex multiscale processes involved in the development of tropical storms, hurricanes and strong mid-latitude cyclones. For this purpose, the process interactions are modeled mathematically via the partially deterministic and partly chaotic or random cascades of scales. This research shall be supported by methods of data visualization.

Requirements

- master's degree or similar in computer science, mathematics, or physics
- very good knowledge and experience in computer graphics or data visualization
- very good knowledge and skills in software development (C++, Python)
- willingness and ability to analyze and produce scientific publications
- good command of spoken and written English.

We expect cooperative work within the Collaborative Research Center, communication and team skills, combined with a high degree of commitment. The opportunity for an intensive training is given. Scientific publications on the highest international level are our goal. A doctorate in data visualization or visual analytics should be strived for.

The candidature of women is encouraged. Since women are underrepresented in information technology, ZIB is trying to increase the proportion of women in this research area.

Persons with disabilities will be given preference, when equally qualified.

Please send your application, quoting the reference code **WA 47/18**, including CV in tabular form and all relevant documents by **September 30st, 2018** (date of receipt) to

Zuse Institute Berlin (ZIB)

- Administration -
Takustr. 7
14195 Berlin

or electronically as pdf-form to: jobs@zib.de.

You find our privacy policy on our website at www.zib.de/impressum.

Further information about the position can be obtained on our website www.zib.de or from Hans-Christian Hege (E-mail: hege@zib.de).

For further job offers please visit our website at www.zib.de.