



**TU Clausthal**  
Clausthal University of Technology

The "Scientific Computing" group at the institute for mathematics (IfM) is inviting applications for a position as

### **Scientific Assistant (m/f) TV-L E13 (100%)**

The position will be limited initially to three years with a possibility for an extension. The intended start of the contract is May 1, 2016.

The successful candidate will perform research in high-performance simulation of porous media, especially he/she will contribute to the development of a prototype model for a next-generation land-surface model for the highly efficient simulation of the water and energy transport at the earth's surface, especially in the vadose zone. The model will combine techniques developed in EXA-DUNE to achieve scalable parallel simulations even on the largest available super computers. It will be carried through in intensive cooperation with a doctoral researcher financed by the German Research Foundation (DFG) and with our partners at TU Dortmund, the universities of Heidelberg, Münster and Stuttgart and the Fraunhofer Institute for Industrial Mathematics.

Participation in teaching (especially calculus and numerics for students of engineering) is mandatory. Applicants should be capable of organizing and holding tutorial groups (up to 4 hours per week) and creating exercise sheets in German after at most 6 months.

We expect strong interest in modelling and numerical simulation of processes in porous media. Applicants should hold a Doctoral degree in mathematics, natural sciences or engineering related to modelling and simulation. Applicants with an excellent Master degree are invited to apply as well. Candidates should have a solid experience in scientific programming with C++ and a good basic knowledge of the numerics of partial differential equations. We expect the ability to work interdisciplinary in a team and good teaching abilities.

As an equal opportunity employer, Clausthal University of Technology actively encourages applications from women. Preference will be given to disabled applicants with equal qualifications.

For questions regarding the research project please contact the head of the scientific computing group Prof. Dr. Olaf Ippisch ([olaf.ippisch@tu-clausthal.de](mailto:olaf.ippisch@tu-clausthal.de)). Interested candidates should send a CV describing background, training and research interests, highlighting experience with modelling and simulation, and certificates as a single PDF (max. 10MB) with the keyword "HIGH PERFORMANCE" to Ilka Brinkmann ([ilka.brinkmann@tu-clausthal.de](mailto:ilka.brinkmann@tu-clausthal.de)) **until March 31, 2016**.