UNIVERSITÄT BIELEFELD

The Collaborative Research Centre (CRC) 1283 "Taming uncertainty and profiting from randomness and low regularity in analysis, stochastics and their applications" has the following job opening in its project A7:

Research Position (Postdoc)



The project A7 "Differential and integro-differential operators with degenerate coefficients" (Prof. Lars Diening/Prof. Moritz Kaßmann) advances the regularity theory of elliptic and parabolic differential and integrodifferential operators with degenerate coefficients. The main emphasis is on elliptic differential operators in divergence form with non-negative definite matrix-valued weights and integrodifferential operators with non-negative definite matrix-valued weights and integrodifferential operators with non-negative kernels. Particular aims include higher integrability and Hölder continuity of solutions resp. their derivatives in settings, where classical ellipticity assumptions fail. Another emphasis is put on the possible occurence of Lavrentiev phenomenons. In project A7, building upon our regularity results, we develop numerical methods including optimal adaptive approximation schemes. Further information available at: https://www.sfb1283.uni-bielefeld.de.

Your Tasks

• research within the framework of the joint SFB project A7 "Differential and Integrodifferential Operators with Degenerate Coefficients" in the area of regularity theory and the numerical analysis of degenerate second order partial differential operators and fractional order operators

Employment is conductive to scientific qualification.

We offer

- salary according to Remuneration level 13 TV-L
- temporary / appointments are for two years with the possibility of renewal for an additional

Your Profile

We expect

- scientific university degree (e.g. Diploma or Master) in Mathematics or Applied Mathematics
- PhD in Mathematics or Applied Mathematics
- previous expertise in one of the mentioned project areas
- independent, self-reliant and dedicated style of work
- ability to cooperate and to work in a team

Preferred experience and skills

• expertise in the regularity theory of local or nonlocal operators two years (§ 2 (1) sentence 2 of the WissZeitVG; in accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases)

- fulltime
- internal and external training opportunities
- wide range of health, consulting and prevention service
- reconcilability of family and working life
- constant place of work (Bielefeld) without travel activities
- flexible working hours
- job ticket for regional public transport network
- supplementary company pension
- collegial working environment
- open and pleasant working atmosphere
- exciting, varied tasks

Application Procedure

We are looking forward to receiving your application. For full consideration, your application should be received via either email (a single PDF document is required) sent to nbrehme@math.unibielefeld.de or post (see postal address). Please mark your application with the identification code: Wiss21907. Please note that the possibility of privacy breaches and unauthorized access by third parties cannot be excluded when communicating via unencrypted e-mail. For Information on the processing of personal data <u>click here</u>.

application deadline: 28.10.2021

Contact

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Bielefeld University has received a number of awards for its achievements as an equal-opportunity employer and has been recognized as a family-friendly university. The university welcomes applications from women. This is particularly true with regard both to academic and technical posts as well as positions in information technology as well as the skilled crafts and trades. Applications are handled according to the provisions of the state statutes on equal opportunity. Applications from suitably qualified handicapped and severely handicapped persons are explicitly encouraged.

At Bielefeld University on request positions can be carried out with reduced working hours as long as this does not conflict with official needs.

