Co-financed by the Connecting Europe Facility of the European Union

The research group on Multiscale and Stochastic Dynamics (www.multiscale.systems) at the Technical University of Munich seeks candidates for the following position:

postdoctoral researcher (3-year) in applied mathematics

Interested candidates should have a background in (at least one) of the following areas:

dynamical systems, stochastic processes, scientific computing or PDE

The position is funded within the interdisciplinary TiPES project (see description below) with a duration of up to 36 months. The successful candidate will join the research activities of the Multiscale and Stochastic Dynamics group at TUM and contribute to the development of the TiPES project with a focus on dynamics of differential equations and related applications in the geosciences. The salary scale is TV-L 13 at 100%, i.e., a full-time postdoc position. The project is carried out in collaboration with several groups within the TiPES Project Team located across Europe. The position will be based in Munich.

Requirements:

- PhD-degree or equivalent (completed or to be completed within 3-4 months)
- strong technical background in mathematics or physics
- general interest in climate/geoscience and related applications
- good English language skills (written and oral)
- excellent grades

Application Materials

- CV + publication list
- transcript(s) for bachelor-/master-level studies
- names and full contact addresses of at least two references
- brief statement of scientific interests / motivation

should be sent as **ONE** PDF-file to: **ckuehn@ma.tum.de**

Evaluation of applications may start immediately, the main application deadline is: **July 15th 2019**. However, applications may be accepted until the position is filled. Once the position is filled, this will be announced on the webpage: http://www.multiscale.systems/jobs.html

About the TiPES project (Tipping Points in the Earth System): Several subsystems of the Earth may respond abruptly at critical future levels of anthropogenic forcing, which have been associated with tipping points (TPs). It is paramount to identify safe operating spaces in terms of these critical forcing levels, in order to prevent harmful transitions to alternative, undesirable states of the Earth and its subsystems. The mechanisms leading to abrupt climate transitions are only partly understood, and reliable warning signals for forthcoming transitions are urgently needed. TiPES addresses these questions in a joint effort of 18 European institutions, combining paleoclimatology, time series analysis, Earth system modelling of past and future climates, applied mathematics and dynamical system theory, as well as decision theory. [This project has received funding from the European Unions Horizon 2020 research and innovation programme under grant agreement No 820970]

Informal inquiries regarding the position should be directed to **ckuehn@ma.tum.de**

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