

Within the DFG funded Priority Program PP 2089 „**Rhizosphere Spatiotemporal Organisation – a Key to Rhizosphere Functions**” we have an open position in the section „Modelling and Numerics“ (Chair of Applied Mathematics) at the Department of Mathematics, Friedrich-Alexander-Universität Erlangen-Nürnberg. We are offering a

PhD Position

in the field of

Reactive Transport and Structure Formation in Porous Media

for three years starting as soon as possible.

The project deals with modelling and simulation of multiscale processes for structure formation in the rhizosphere, which is the region of the soil influenced by plant roots. We use models on the basis of cellular automata and coupled partial differential equations. Further information can be given by the principal investigators PD Dr. Nadja Ray and Dr. Alexander Prechtel, for information on the priority program see also <https://www.ufz.de/spp-rhizosphere> .

Required is an above-average master's degree in mathematics, computational engineering or a related discipline. We suppose you have some knowledge in mathematical modelling, numerical methods for PDEs, and experience with programming and implementation of algorithms. In particular the interest for solving applied problems in a highly interdisciplinary cooperation with, e.g., soil physicists, chemists, or plant physiologists, is necessary. The candidate should attend regular project meetings in Germany and international scientific conferences.

FAU promotes equal opportunities, diversity, and the compatibility of work and family. Women are therefore explicitly encouraged to apply. Disabled Persons will be given preferential consideration in cases of equal professional qualifications and personal suitability. Remuneration is according to the salary rules of the public sector in Germany (TV-L E13), working time is **75%**.

Please send your application (cover letter, CV, an official listing of your grades, and contact details of a reference, if possible) until **March 31, 2022** electronically to:

Dr. Alexander Prechtel
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91058 Erlangen, Germany
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The position will remain open until filled.