Institute for Multiscale Simulation
Friedrich-Alexander University
Erlangen-Nürnberg

The 2nd cohort of the Research Training Group GRK 2423 FRASCAL ("Fracture across scales") funded by the German Science Foundation will start on January 1st, 2022.

Environment

FRASCAL
FRASCAL aims to improve understanding of fracture in brittle heterogeneous materials by developing simulation methods able to capture the multi scale nature of failure. The GRK 2423 offers 11 doctoral positions in projects P1 through P11 and 1 postdoctoral position in P12. This is the offer for project P4

MSS
At the MSS, we investigate the multi-scale physics of particulate systems. The MSS hosts an interdisciplinary research team with a unique combination of scientists working numerically, theoretically and experimentally.

Project

We develop simulation methods to study large-scale granular material of irregularly shaped grains, including fragmentation of the grains. To achieve realistic simulation results, we apply multi-scale approaches in combination with the mechanics of fracture. We aim to apply the simulation methods to study granular systems of different type including engineering and geological applications.

Requirements

- Hold or (about to obtain) M.Sc. degree in mechanics, material sciences, physics, or a closely related field
- Proficiency in English language. Knowledge of German language is welcome
- Strong communication skills. You are able to work independently and as a part of a team

How to apply

Please send a single pdf including:
- Motivation letter (max 1 page)
- Copy of master degree
- Academic transcripts
- Brief summary of master thesis
- Short cv including list of publications

Contact

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