A PhD or postdoc position on

structure formation in granular matter

is available at the

Institute for Multiscale Simulation
at the Friedrich-Alexander-University Erlangen-Nürnberg
www.mss.cbi.fau.de

environment

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

topic

In driven granular systems even simple local particle interactions can lead to the formation of many-faceted, often unexpected structures on the global scale. The underlying self organization processes are due to the interplay of dissipation and excitation which is characteristic for granular systems. The aim of the project is to characterize und understand the corresponding dynamics by means of numerical simulations as well as methods of statistical physics and kinetic theory. Parts of the simulative/theoretic work is directly related to experimental research at the institute. Technical applications include the optimization of the raking process in powder-bed 3D-printing and the optimization of granular pipe flow.

profile

You are highly motivated and you are deeply committed to research. You are able to work independently and as part of a team. You are equipped with an analytical and critical mind-set and you communicate clearly and concisely.

qualification

- master's degree in physics or related
- background in computational physics
- programming skills (e.g. C++, Python, Matlab)
- experience in particle simulations (e.g. DEM)

application

- one single pdf including your research statement, your CV and, if applicable, a list of your publications
- Please send your application to
  Prof. Thorsten Pöschel
  mss-recruitment@fau.de
  applications will be considered until the position is filled.

FRIEDRICH-ALEXANDER
UNIVERSITÄT
ERLANGEN-NÜRNBERG

Institute for
Multiscale Simulation
MSS