2 PhD positions (experiment + simulation)

laser based additive manufacturing in space

Institute for Multiscale Simulation (MSS) Friedrich-Alexander-University Erlangen-Nürnberg (FAU), Erlangen, Germany

environment

At MSS, we investigate the multiscale physics of particulate systems. The international research team offers an interdisciplinary environment, working numerically, theoretically and experimentally.

topic

We make laser-based additive manufacturing of metals fit for future extraterrestrial missions in low gravity. In the interplay between experiment and simulation we will investigate how relevant phenomena like the wetting behavior of the molten material and convective processes therein depend on gravity. The project is funded by the German Aerospace Center and includes the opportunity to take part in parabolic flight campaigns.

profile

- master's degree in physics, engineering or related
- background in computational physics appreciated preferably particle based methods (simulation track)
- interest and experience in experimental physics appreciated, preferably laser material processing or computed tomography (experimental track)
- willingness to participate in low-gravity campaigns (e.g. parabolic flights)
- excellent speaking and writing skills in English

application send questions and your application (single pdf including reference number MSS-2024-WS, cover letter, CV and, if applicable, a list your publications) to

Prof. Thorsten Pöschel, <u>mss-recruitment@fau.de</u>

review of applications begins on **July 8 2024**, later applications will be considered until the position is filled.

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