PhD position reconstruction algorithms for electric impedance tomography

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 The aim of the project is to improve the temporal and spatial resolution of electro impedance tomography. This requires novel measurement and reconstruction techniques. Your part will be to develop, implement and validate the reconstruction algorithms and to integrate them into our measurement setup for real-time imaging. The measurement setup will be developed by an experimental colleague in close collaboration with you. An important application of the results is to improve the operational safety of power plants by visualizing and monitoring the rapid thermohydraulic liquid-gas flows in the cooling system.

profile You are highly motivated and 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.

- master's degree in physics, mathematics, engineering or related
- background in e.g. statistics, image reconstruction, machine learning or data science appreciated
- willingness to collaborate closely with colleagues working experimentally
- excellent speaking and writing skills in English

offer

starting date limitation application deadline

March 1, 2024 36 months January 14, 2024

application Send questions and your application (single pdf including cover letter, CV and, if applicable, a list of your publications) to Prof. Thorsten Pöschel, mss-recruitment@fau.de



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