

Job posting

Type of position

scientific

administrative

Target group

graduates

post docs

other

Title

PhD position in "micromorphic metamaterials' modeling"

Institution

TU Dortmund University has a strong focus on research. The university's disciplines with its emphasis on mechanical engineering, physics, and computer science are well known for their outstanding research achievements both nationally and internationally.

Position

This PhD position is associated to the ERC Consolidator project META-LEGO (link: <https://angela.madeo.uniroma.wixsite.com/angela-madeo/contact-me>).

Responsibilities

The PhD work focuses on the continuum modeling of metamaterials and the conception of meta-structures that control elastic waves and recover energy.

Thereby, the PhD will be involved in the development of an enriched micromorphic model and its calibration on specific metamaterials (theoretical / use of Mathematica software). Finite Element simulations will also be developed: implementation of the model on realistic meta-structures (use of COMSOL software).

Requirements

Good knowledge of continuum mechanics and dynamics of solids as well as experience in FEM.

Application procedure (deadline etc.)

Salary and benefits are according to a public service position in Germany (TV-L E13). The contract should start on November 15th 2021 and will be restricted to 3 years.

Contact

If you are convinced about your motivation, please send me a CV, your bachelor's and master's transcripts and a motivation letter at angela.madeo@tu-dortmund.