Doctoral Position in Mathematics

Applications are invited for one doctoral position in Mathematics within the Research Training Group Energy, Entropy, and Dissipative Dynamics (EDDy) at RWTH Aachen University (Germany),

starting January 2023 or as soon as possible.

The program will provide the doctoral researcher with a quality education in analysis, modeling, and numerics in the fields of nonlinear partial differential equations and applied mathematics. Carefully selected research projects—tied together by the use of *energy and/or entropy functionals* and their *dissipation mechanisms* as a tool for understanding the properties of the system and the admissible dynamics—will introduce the doctoral researcher to relevant and challenging topics at the forefront of current mathematical research.

Employment will be for three years. The positions are funded by German Research Foundation (DFG).

Your profile

We are looking for a highly motivated, excellent candidate with strong mathematical skills and interest in applied mathematics. Applicants must hold a master's or equivalent degree in Mathematics or related field. Knowledge in numerics is required and experience with numerics of hyperbolic equations is particularly welcome. Fluency in both written and spoken English is necessary.

Your responsibilities

The doctoral researcher will work on a numerical research project, participate in the activities of the Research Training Group, and pursue a doctoral degree. Applications must be written in English or German and should be emailed to

info@eddy.rwth-aachen.de

containing in a single .pdf-file the

- completed application form (download from website),
- cover letter explaining motivation,
- curriculum vitae,
- summary of master's thesis,
- transcript (list of all courses including grades), and
- copies of degree certificates.

The position is offered for either of the two topics "Efficient numerical methods for stochastic hyperbolic conservation laws" or "Flow solutions for transport equations" as outlined on the EDDy website. Applicants are asked to inform themselves beforehand about the possible Ph.D. topics and explain their interest in their cover letter. Additionally, **two letters of recommendation** by senior scientists, commenting on the applicant's qualifications, should be sent directly to the email address above.

Applications can be submitted anytime.

Women and members of other underrepresented groups are particularly encouraged to apply.



