

The Collaborative Research Center “Wave phenomena – analysis and numerics” (CRC 1173), is currently seeking to recruit, as soon as possible, limited to two years, a

### **Postdoctoral Researcher (f/m/d) Associated Project “Nonlinear Helmholtz Equations and Systems”**

The CRC has been funded by the German Research Foundation (DFG) since 2015. Its goal is to analytically understand, numerically simulate, and eventually manipulate wave propagation under realistic scenarios by intertwining analysis and numerics.

The Associated Project “Nonlinear Helmholtz Equations and Systems” aims to establish a solution theory describing oscillatory solutions of Nonlinear Helmholtz Equations and time-harmonic Maxwell's Equations in inhomogeneous media. One of the central tasks is the derivation of new Limiting Absorption Principles and resolvent estimates for the linear operators under investigation as well as their applications to nonlinear problems.

We seek for an ambitious postdoctoral researcher with strong research interest in these or related research fields, which is preferably demonstrated by outstanding publications or preprints. Engagement in teaching is expected.

We provide an inspiring, attractive, interdisciplinary, and internationally recognized scientific environment with access to excellent facilities of the KIT, a wide scope of advanced training options within our integrated research training group, and flexible working time models. Our CRC aims at the implementation of equal opportunities, it promotes diversity and supports persons with childcare or eldercare responsibilities as well as persons with disabilities. Funds for travel and guests are available through the CRC.

#### **The following qualifications are required:**

- Excellent PhD thesis and expertise in partial differential equations.
- We expect good writing and oral communication skills in English along with the ability to work independently within an international team.

Applications should include a cover letter, a curriculum vitae, links to your publications and your PhD thesis, a statement of research interest (not more than 2 pages), contact information for two referees, and copies of degree certificate(s) in one pdf-file.

**We offer** an attractive and modern workplace with access to excellent facilities of KIT, diverse and responsible tasks, a wide scope of advanced training options, supplementary pension with the VBL (Pension Authority for Employees in the Public Service Sector), flexible working time models, a job ticket (BW) allowance, and a cafeteria/canteen.

We prefer to balance the number of employees (f/m/d). Therefore, we kindly ask female applicants to apply for this job. If qualified, severely disabled persons will be preferred.

Please apply online (<https://www.waves.kit.edu/joboffers.php>) until **August 31<sup>st</sup>, 2020** using the vacancy number **3660/2020** and reference number **8**. Personnel support is provided by Ms. Brückner, Personalservice, Karlsruhe Institute of Technology (KIT), Campus Süd, Kaiserstraße 12, 76131 Karlsruhe. For further information, please contact Dr. Rainer Mandel, phone +49(0)721-608-46178, or Ms Laurette Lauffer, phone +49(0)721/608-42061, [Laurette.lauffer@kit.edu](mailto:Laurette.lauffer@kit.edu).



Further details can be found on our website: [www.kit.edu](http://www.kit.edu).

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