



# POSTDOC POSITION (FIXED END-DATE) OPTOMECHANICS FOR FUTURE GRAVITATIONAL WAVE DETECTORS - SALARY LEVEL 13 TV-L -



The research group for gravitational wave detection (GWD) at the Institute of Experimental Physics of the University of Hamburg (<u>https://www.physik.uni-hamburg.de/iexp/gwd</u>) is looking for a candidate to join the group as a postdoc for up to 10 months to support the start-up phase of the group and to conduct scientific preparatory work for collaborative research proposals. This position is funded through the University of Excellence Risk and Idea Fund of the University of Hamburg and has a fixed end-date at the end of March 2021. The maximum amount of months that can be funded is 10, corresponding to starting the position in June 2020. The short-term nature of the position means that it will be awarded as soon as a suitable candidate has been found, so please indicate your interest as soon as possible.

### **ENVIRONMENT:**

The newly established GWD group aims to study and develop metrology for current and future ground and space-based detectors, focusing on interferometric sensors that use high-speed digital signals processing and quasi-monolithic optomechanics to reduce low frequency noise sources. The group is also part of the Quantum Universe Cluster of Excellence, which performs research to understand mass and gravity at the interface between quantum physics and cosmology (www.qu.uni-hamburg.de).

### **SPECIFIC DUTIES:**

The candidate shall focus on the following tasks (adjustable based on candidate interest):

- Conception, quantitative analysis and preparation of research projects in areas such as optomechanical inertial sensors to prepare for collaborative research proposals
- Perform pre-experiments for these projects
- Prepare, install and commission an inertial sensing test platform

Some flexible funds for travel, student helpers and workshops are available. The position can also be used to support the preparation of a funding proposal of the candidate.

## **REQUIREMENTS:**

A university degree and a doctorate in a relevant field, high intrinsic motivation, individual responsibility, creative scientific thinking and the ability to work in an international team.

For further details, or to apply, contact Prof. Oliver Gerberding (<u>oliver.gerberding@physik.uni-hamburg.de</u>). Please provide a formless cover letter (e-mail text is sufficient), a CV and two contacts to senior scientists that would be available to provide some oral recommendation.

### Note: An extension of this position on the available funds is not possible.

