The Institut für Erdmessung (IfE) invites applications for the position of a

Doctoral or PostDoctoral Researcher (m/f/d) on Quantum Inertialnavigation for LEO-PNT (Salary Scale 13 TV-L, 100 %)

starting October 1st, 2023. The position is limited to 3 years.

Responsibilities and duties

The Institut für Erdmessung is researching the use of quantum inertial navigation with partners from physics. In this project in cooperation with the TU Munich, the potential for improvement of spacecraft navigation using quantum inertial sensor technology will be investigated. This is to be demonstrated using the example of orbit determination of Galileo and LEO satellites for Positioning, Navigation and Timing (PNT) applications. The work includes the further development of inertial navigation algorithms for satellite orbit determination, the development of suitable filters to take quantum sensors into account, the performance of simulation studies in MATLAB/Simulink.

We offer an attractive position in an interdisciplinary team working in a highly relevant topical field of research, which provides excellent opportunities for further professional qualification.

Employment conditions

The prerequisite for employment is a completed scientific university degree in aerospace (orbit determination, space flight planning), physics (quantum sensor technology), geodesy/navigation or a related discipline. Furthermore, enjoyment of interdisciplinary, independent work and good knowledge of the English language are required. Solid experience in at least one of the areas: Development of navigation filters, inertial navigation or quantum sensing as well as a confident handling of MATLAB is expected.

Leibniz University Hannover considers itself a family-friendly university and therefore promotes a balance between work and family responsibilities. Part-time employment can be arranged upon request.

The university aims to promote equality between women and men. For this purpose, the university strives to reduce under-representation in areas where a certain gender is under-represented. Women are under-represented in the salary scale of the advertised position. Therefore, qualified women are encouraged to apply. Moreover, we welcome applications from qualified men. Preference will be given to equally-qualified applicants with disabilities.

Leibniz Universität Hannover

Applications have to include a CV, the full academic record (certificates, transcript of record of B.Sc. and M.Sc. or equivalent in English or German language).

Please send your application in German or English language until August 6, 2023 in electronic form (one single PDF document) to

Email: schoen@ife.uni-hannover.de

or alternatively via postal mail to: **Gottfried Wilhelm Leibniz Universität Hannover**Institut für Erdmessung
Att. Prof. Dr. Steffen Schön
Schneiderberg 50, 30167 Hannover
http://www.uni-hannover.de/jobs

For further information, please contact Prof. Dr.-Ing. Steffen Schön (Tel.: 0049 (0)511 762-3397, Email: schoen@ife.uni-hannover.de).

Information on the collection of personal data according to article 13 GDPR can be found at https://www.uni-hannover.de/en/datenschutzhinweis-bewerbungen/.