

The German Aerospace Center (DLR) and the Faculty of Engineering, Computer Science and Psychology at the Ulm University are seeking in a joint appointment procedure (Jülich model) a

## university professor (W3 without management function) (f/m/x) for electromagnetic quantum sensors,

who will be appointed to the Ulm University and at the same time granted leave of absence with a reduced teaching load (two semester hours per week) to take up the position of

## Department Head (f/m/x) in the field of "Electromagnetic Quantum Sensors" at the DLR Institute of Quantum Technologies

The Ulm University has a strong research focus in the fields of medicine, natural sciences and technology. The Faculty of Engineering, Computer Science and Psychology conducts research in its institutes on topics including electrical engineering, information processing, artificial intelligence and biomedical engineering. The professorship is based at the Institute for Electronic Components and Circuits at the Ulm University, whose research and teaching focuses on integrated high-frequency circuits and microsystems, which are of great interest for applications of quantum technologies.

DLR is the national aeronautics and space research center of the Federal Republic of Germany. Its extensive research and development work in aeronautics, space, energy, transport, civilian security and defense research and digitalization is integrated into national and international cooperative ventures. DLR develops technologies for a sustainable future and contributes to strengthening Germany as a center of knowledge and business through knowledge exchange with public stakeholders and transfer to the economy. The DLR Institute of Quantum Technologies conducts research at its Ulm site into precision instruments for space applications based on quantum technologies and brings these to prototype maturity in collaboration with industry. It also promotes transfer in the fields of aeronautics, digitalisation, energy, security and transport. Further information about the institute can be found at <https://www.dlr.de/en/qt/>.

The focus of research and transfer in the field of electromagnetic quantum sensors is on:

- quantum sensor systems for the precise and accurate detection of electromagnetic fields
- experimental research into novel quantum sensors (e.g. based on Rydberg atoms or NV centres in diamond)
- integration of electronic and optical quantum sensor systems

The following research work should be demonstrated in the above-mentioned areas:

- demonstration of robust, compact and miniaturised prototypes
- optimisation with regard to specific areas of application and real environmental conditions
- applications and verification in collaboration with industry

These topics should be applied in space technology such as Earth observation and satellite communication. In addition, technology transfer in areas of application such as communication, mobility and security should also be promoted.

You are enthusiastic about research, teaching and technology transfer and are a scientifically proven personality (f/m/x) with:

- several years of experience in leading larger groups, ideally in industry
- profound experience and excellent scientific achievements in several of the above-mentioned research areas
- experience in interdisciplinary collaborations at national and international level
- experience in collaborating with industry and in acquiring and implementing third-party funded projects
- experience in knowledge exchange with public stakeholders and transfer to industry
- experience and aptitude for teaching courses with didactic skills

Security clearance as well as the willingness to security clearance pursuant to §§ 8 ff. Security Clearance Act (SÜG) is a condition for employment at DLR. Furthermore, the willingness to participate in topics in the field of defense technology research at the DLR is required.

Employment requirements at the Ulm University are completed university studies as well as teaching aptitude, a doctoral degree and further pertinent scientific achievements (§ 47 LHG).

The Ulm University and the DLR are seeking to increase the proportion of women in research and teaching and particularly encourage qualified female scientists to apply for this position. Severely disabled applicants with equal aptitude will be given preferential consideration. Applications from scientists from abroad are expressly welcome.

Have we sparked your interest? We look forward to receiving your detailed application with the usual documents (CV with a description of your scientific and professional career, list of publications with the five most important publications, list of third-party funded projects, list of courses taught, teaching evaluations, research and teaching concept, copies of certificates and diplomas), including a cover letter addressed to both Dr Anke Pagels-Kerp, DLR-Divisional Board Member for Space, and Prof. Matthias Tichy, Dean of the Faculty of Engineering, Computer Science and Psychology. These must be submitted in electronic form (as a PDF file) by **April 7th, 2026** via the University of Ulm's **online application portal**.

Contact person at the university for further information:

Prof. Christian Damm, Tel. **+49 731 50-26360**

Contact person at DLR for further information:

Prof. Dr. Kai Bongs, Tel. **+49 731 400198-110**

The processing of your personal data by DLR is based on a contract between the University and DLR in accordance with Article 26 of the GDPR (Datenschutzgrundverordnung, DSGVO). The essence of the agreement in accordance with Article 26(2) sentence 2 GDPR and information about the processing of personal data by DLR in the context of the appointment procedure can be viewed here:

<https://www.dlr.de/de/service/datenschutzhinformationen-uulm-dlr/@@download/file>