



**Deutsches Zentrum  
DLR für Luft- und Raumfahrt e.V.**  
in der Helmholtz-Gemeinschaft

**The German Aerospace Center (DLR) is Germany's national research center for aeronautics and space and Germany's space agency. Its extensive research and development work in Aeronautics, Space, Transportation and Energy is integrated into national and international cooperative venture. Approximately 5.600 people are employed in DLR's 28 institutes and facilities at 13 locations in Germany.**

For the **Institute of Communications and Navigation** located in Oberpfaffenhofen near Munich we are seeking candidates for the position of a **scientist**, holding an **MSc/Engineering degree** in

## Electrical Engineering / Information Technology / Physics

**Your Task:** For future terminal antennas to be used in satellite navigation for precise positioning and in satellite communications for broad-band data transmission, suitable technologies and beamforming algorithms have to be developed. Suitable breadboard models for concept validation shall be fabricated and tested in demonstration scenarios. The tasks include the realisation of a procedure to determine the antenna-array phase centre, the optimization of architecture and geometry w.r.t. carrier-phase navigation and the implementation of methods for beamforming and direction-of-arrival (DOA) estimation. You will also be involved in the acquisition and execution of national and international projects.

**Your Qualification:** The qualified candidate must have an excellent MSc (diploma) in Electrical Engineering, Information Technology or Physics, strong knowledge of high-frequency, microwave and communication engineering, knowledge of antenna design and computation, strong knowledge of antenna and RF measurements, programming skills and excellent verbal and written communication skills in German and English language.

We offer you a very good work climate within a successful research and development group, equipment according to the latest state of engineering as well as a scientific environment with international co-operations. There exist many opportunities for further professional education and qualification (e.g. Ph.D).

The appointment is first limited to three years. The salary is according to TVöD, social benefits corresponding to civil service.

Severely handicapped applicants with equal professional skills will be considered preferentially.

DLR tends to increase the number of employed women and encourages corresponding applications.

**Interested?** Please submit your application including resume, scholar (baccalaureate or similar) and academic records and a list of publications (if applicable) using reference number **2007/151** to

German Aerospace Center (DLR), Administration, D-82234 Wessling, Germany

You may also apply via E-mail to [Achim.Dreher@dlr.de](mailto:Achim.Dreher@dlr.de).

General information on our research institution can be found on our website [www.dlr.de](http://www.dlr.de).