

Staff Scientist – Magnetic Resonance Imaging Specialist for 7T MRI

The Max Planck Institute for Empirical Aesthetics (MPIEA) investigates why and how people create art and how they perform, experience, and evaluate it. The Institute's focus is on music, but we also engage with other performing arts such as dance and film.

We invite applications for a

Staff Scientist - Magnetic Resonance Imaging Specialist for 7T MRI

to work with **Dr. Dimo Ivanov** at the Cooperative Brain Imaging Center in Frankfurt am Main. The successful candidate will be integral to our mission of advancing cutting-edge neuroimaging research. This role offers the opportunity to work with state-of-the-art Siemens Terra.X 7T MRI technology and collaborate with leading researchers and clinicians locally and internationally.

Your tasks:

- Provide technical expertise and support for the operation and development of the 7T MRI system;
- Lead the implementation and optimization of advanced imaging protocols, including parallel transmission imaging;
- Collaborate with interdisciplinary teams on neuroscientific and clinical research projects, including studies on neurologic and neurodegenerative disorders;
- Develop and implement MR techniques such as functional MRI, quantitative susceptibility mapping, and arterial spin labeling;
- Ensure seamless integration and management of imaging protocols during system upgrades;
- Facilitate communication and collaboration with external partners, including Siemens and other research institutions.

Our requirements:

- PhD in Physics, Biomedical Engineering, or a related field with a strong focus on structural and functional magnetic resonance imaging;
- Proven experience with high-field MRI systems (7T or above), including hardware and software expertise (e.g., Siemens IDEA and ICE programming);
- Demonstrated success in developing and implementing imaging sequences and protocols for research and clinical applications;
- Strong programming skills (e.g., C++, Python, MATLAB) and familiarity with Linux systems;
- Excellent interpersonal and teamwork skills with a history of fostering productive collaborations;
- Proficiency in English (command of German and additional language skills are an asset).

Preferred Experience:

- · Hands-on experience with MRI scanner upgrades and transitioning between different software baselines;
- Expertise in shimming procedures, MRI quality assurance, and analysis methods;
- Knowledge of MR spectroscopy acquisition and analysis.

What we offer:

- An inspiring work environment with access to cutting-edge imaging facilities;
- Opportunities to contribute to innovative research in neuroscience and clinical imaging;
- A highly collaborative and dynamic work culture with interdisciplinary interaction;
- Professional growth through technical and scientific challenges.

The MPIEA provides access to outstanding neuroimaging facilities and research infrastructure (two 3T-MRI scanners, one 7T-MRI scanner, MEG, EEG, eye tracking, and psychophysics labs) in a top-modern and newly constructed building. It is located in Frankfurt am Main, a city with an interdisciplinary neuroscience community, including Goethe University and three research institutes that are part of or associated with the Max Planck Society. Frankfurt also offers a high quality of life, a rich cultural scene, and a diverse, international environment, making it an attractive place to live and work.

The position is available flexibly from April 2025 onwards. The initial contract duration is for a fixed term of two years. Payment is based on the Collective Wage Agreement for the Civil Service (TVöD Bund).

Your application:

The Max Planck Society strives for gender equality and diversity. We are also committed to increasing the number of individuals with disabilities in our workforce. Therefore, applicants of all backgrounds are welcome.

To apply, please include all documents in one PDF-file (your name as file name) in the following order: your CV (3 pages max.); a statement describing your research interests, personal qualifications, and motivation (2 pages max.); copies of relevant degrees and/or certificates; the names and contact information of two references who have previously agreed to be contacted; and copies of your two most relevant publications.

Please send these materials via our application management system no later than March 2, 2025.

For informal enquiries, please feel free to contact Dr. Dimo Ivanov via dimo.ivanov@ae.mpg.de.

Max Planck Institute for Empirical Aesthetics Grüneburgweg 14, 60322 Frankfurt am Main