

The Department of Physics has a vacancy for a Postdoc position in ultra-high field MRI

This is NTNU

At NTNU, creating knowledge for a better world is the vision that unites our 7 400 employees and 42 000 students.

We are looking for dedicated employees to join us.

You will find more information about working at NTNU and the application process [here](#).

Video: <https://www.youtube.com/watch?v=clgKd1SwGLI>

About the position

The Department of Physics has a vacancy for a postdoc in MR physics, more specifically in development of pTX methods in ultra-high field MRI.

We have a vacancy for a 3-year postdoc position as part of an international collaboration project in ultra-high field MRI. The SCAIFIELD project is financed through the EU Joint Programme for Neurodegenerative Disease Research (JPND) and involves four partners from three countries (Belgium, Norway, and Germany). The goal of the project is to establish quantitative 7 Tesla MRI biomarkers for Ataxia disease with high potential for detecting early disease manifestation and monitoring progression. Specifically, the postdoc position at NTNU will focus on the development of parallel transmit methods tailored for applications in the cerebellum and brainstem. The position will include both MR sequence programming and in-vivo experiments.

The position is affiliated with the MR physics group at NTNU in close collaboration with the Norwegian 7T MR Center (www.ntnu.edu/mh/7tmr). The appointed candidate will become part of a cross-disciplinary team of researchers and clinicians in ultra-high field MRI dedicated to bringing 7T MRI into clinical research and routine.

You will report to Professor Pål Erik Goa

Duties of the position

- Develop novel parallel transmission (pTx) methods for 7T MR imaging at the cerebellum and the brain stem.
- Implementation of pTx into MR sequences developed in collaboration with SCAIFIELD project partners.

Required selection criteria

A postdoctoral research fellowship is a qualification position in which the main objective is qualification for work in academic positions. You must have completed a Norwegian doctoral degree in physics, medical physics or related disciplines, or corresponding foreign doctoral degree recognized as equivalent to a Norwegian doctoral degree is required.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the selection committee will take this into account, recognizing that the quantity of your research may be reduced as a result.

The appointment is to be made in accordance with the regulations in force concerning [State Employees and Civil Servants and national guidelines for appointment as PhD, post doctor and research assistant](#).

Required qualifications

- Experience in MR sequence development, ideally in human brain imaging
- Excellent MR physics competence, ideally within ultra-high field.
- Strong programming skills, ideally in C++, Python and Matlab.
- Good written and oral English language skills.

Preferred selection criteria

- Experience with parallel transmission, RF pulse design and SAR calculations
- Experience in Siemens IDEA sequence development environment.

Personal characteristics

- Creative, highly motivated to develop new MR imaging techniques
- Enjoy teamwork as well as working independently in a stimulating scientific environment
- Highly collaborative and with good communication skills

We offer

- exciting and stimulating tasks in a strong international academic environment
- an open and [inclusive work environment](#) with dedicated colleagues
- favourable terms in the [Norwegian Public Service Pension Fund](#)
- [employee benefits](#)

Salary and conditions

The employment period is 3 years with preferred start-up date 01.06.2021.

Postdoctoral candidates are placed in code 1352, and are normally remunerated at gross from NOK 545 300 per annum before tax, depending on qualifications and seniority. From the salary, 2% is deducted as a contribution to the Norwegian Public Service Pension Fund.

The engagement is to be made in accordance with the regulations in force concerning State Employees and Civil Servants, and the acts relating to Control of the Export of Strategic Goods, Services and Technology. Candidates who by assessment of the application and attachment are seen to conflict with the criteria in the latter law will be prohibited from recruitment to NTNU. After the appointment you must assume that there may be changes in the area of work.

The position is subject to external funding.

It is a prerequisite you can be present at and accessible to the institution daily.

About the application

The application and supporting documentation to be used as the basis for the assessment must be in English.

Publications and other scientific work must follow the application. Please note that applications are only evaluated based on the information available on the application deadline. You should ensure that your application shows clearly how your skills and experience meet the criteria which are set out above.

The application must include:

- CV, certificates and diplomas
- Academic works - published or unpublished - that you would like to be considered in the assessment (up to 5 works)
- Name and address of three referees

Joint works will be considered. If it is difficult to identify your contribution to joint works, you must attach a brief description of your participation.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability.

NTNU is committed to following evaluation criteria for research quality according to [The San Francisco Declaration on Research Assessment - DORA](#).

General information

[Working at NTNU](#)

A good work environment is characterized by diversity. We encourage qualified candidates to apply, regardless of their gender, functional capacity or cultural background.

The city of Trondheim is a modern European city with a rich cultural scene. Trondheim is the innovation capital of Norway with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

As an employee at NTNU, you must at all times adhere to the changes that the development in the subject entails and the organizational changes that are adopted.

Information Act (Offentleglova), your name, age, position and municipality may be made public even if you have requested not to have your name entered on the list of applicants.

If you have any questions about the position, please contact Pål Erik Goa, , email pal.e.goa@ntnu.no.

Please submit your application electronically via jobb norge.no with your CV, diplomas and certificates. Applications submitted elsewhere will not

be considered. Diploma Supplement is required to attach for European Master Diplomas outside Norway. Chinese applicants are required to provide confirmation of Master Diploma from [China Credentials Verification \(CHSI\)](#).

If you are invited for interview you must include certified copies of transcripts and reference letters.

Please refer to the application number **NV-02/21** when applying.

Application deadline: 15.02.2021

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Jobbnorge ID: 198514, Deadline: 15.02.2021, Customer reference: 2021/1386