Researcher in Experimental Particle Physics at The Department of Physics

Job description

One position as researcher in Experimental Particle Physics is available at the Department of Physics. The position is for a period of one year with the possibility of an extension of one year (if funding is secured), starting as soon as possible. The successful candidate is expected to spend a substantial fraction of their time at CERN, Geneva (Switzerland).

More about the position

The Large Hadron Collider at CERN, in operation since 2010, has been a key to the discovery of the Higgs boson in 2012. To achieve higher luminosities the collider and its experiments will be upgraded in the mid-2020s to deliver 3000 fb⁻¹ by 2037. Norway participates in the ATLAS experiment and is contributing to build 3D silicon pixel sensors for the Inner Tracker. The researcher sought for will have a central role in this upgrade work, primarily by taking responsibility for the Norwegian participation in ATLAS test-beams, collecting and analyzing data, and for qualifying modules for production and installation in ATLAS.

The researcher will be part of a dynamic team consisting of researchers, engineers, and students from the Universities of Oslo and Bergen as well as SINTEF, and be part of the much larger ATLAS pixel collaboration with participants from all over the world.

This position will be part of the NorLHC infrastructure project, which is a 5-year project funded by the Norwegian Research Council to upgrade the LHC experiments ATLAS and ALICE and the World Wide LHC Computing Grid. The successful candidate will work primarily with test beams, data analysis and development of mechanical systems, and to some extent with pixel detectors construction, and electrical test-systems.

She or he will be required to interact in an international environment, meet deadlines set by the collaboration and report and present internationally. The candidate is expected to take a leading role in our module validation and qualification programme.

Qualification requirements

The Faculty of Mathematics and Natural Sciences has a strategic ambition of being a leading research faculty. Candidates for these positions will be selected in accordance with this, and expected to be in the upper segment of their class with respect to academic credentials.

Required qualifications:

- A master's degree or similar in experimental particle physics, semiconductor physics, electronics or instrumentation
- In-depth knowledge and experience of semiconductor sensor technology
- Sufficient knowledge and experience of ASICS and electronics
- Good language skills, in particular a good command of both written and spoken English.

Desired qualifications:

- Experience with test beam characterization of tracker detector modules.

We offer

- Salary NOK NOK 479 600 - 563 700 per annum depending on qualifications in position as Researcher (position code 1108)
- Attractive *welfare benefits* and a generous pension agreement
- Professionally stimulating working environment
- Vibrant international academic environment
- Career development programmes
- Oslo’s family-friendly surroundings with their rich opportunities for culture and outdoor activities

How to apply

An expert committee will evaluate the applications. Information and materials that should be considered by the committee must be submitted within the deadline. Applicants will normally be called in for interview.

The application must include:

- Application letter including a description of scientific interests, and the motivation for applying for the position.
- CV (summarizing education, positions and academic work).
Copies of educational certificates and transcript of records.
Complete list of publications and academic work.
Up to five highlighted publications.
Names and contact details of 1-2 references

Foreign applicants are advised to attach an explanation of their University’s grading system. Please remember that all documents should be in English or a Scandinavian language.

Applications with documents missing will not be considered further.

Formal regulations

Please refer to the regulations for the use of researcher positions:

According to the Norwegian Freedom of Information Act (Offentleglova) information about the applicant may be included in the public applicant list, also in cases where the applicant has requested non-disclosure.

The University of Oslo has an agreement for all employees, aiming to secure rights to research results etc.

In accordance with the University of Oslo’s equal opportunities policy, we invite applications from all interested individuals regardless of gender or ethnicity. The University of Oslo has a goal of recruiting more women in academic positions. Women are encouraged to apply.

Contact information

Professor Heidi Sandaker, heidi.sandaker@fys.uio.no, ph.: +47 228 56427,

Professor Alex Read, a.l.read@fys.uio.no, ph.: +47 975 44475 or

Researcher Ole Røhne, o.m.rohne@fys.uio.no, ph.: + 47 464 73677

For technical questions about the recruitment system, HR Adviser Elin Thoresen, email: elin.thoresen@mn.uio.no

About the University of Oslo

The University of Oslo is Norway’s oldest and highest rated institution of research and education with 28 000 students and 7000 employees. Its broad range of academic disciplines and internationally esteemed research communities make UiO an important contributor to society.

The research at the Department of Physics covers a broad range of subfields within physics and technology: From space research to medical physics. A good proportion of the research is interdisciplinary, and conducted in close cooperation with collaborators in Norway and abroad. Education and teaching are other essential activities.

We offer a broad range of courses, and the Department is involved in several study programmes at bachelor’s and master’s level. Some of the best lecturers in Norway are amongst our employees, and we are proud of our prizewinning teaching and learning environment. The Department has 200 employees, of which 50 are permanent scientific positions. On a yearly basis 20 students complete their Ph.D. and 50 finish their M.Sc. degree.

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