



PhD position in Experimental Particle Physics

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PhD position in Experimental Particle Physics

There is a vacancy for a PhD position in experimental particle physics at the Department of Physics and Technology. The position is for a fixed-term period of 3 years. The position is financed by a project of the GRIEG program grant "Understanding the Early Universe: interplay of theory and collider experiments" in collaboration with the particle theory group at the Department of Physics, University of Warsaw. The position is based in Bergen with a possibility of frequent visits to CERN and the University of Warsaw.

About the project/work tasks

This project will be carried out within the group for Experimental Particle Physics and its participation in ATLAS experiment at CERN's LHC (Large Hadron Collider). This experiment has participation from several thousand physicists around the world and collects data from proton-proton collisions at extremely high energy. The Bergen research group has a long tradition of measurements with the purpose of improving our knowledge of the properties of particles and processes as described by the Standard Model of elementary particles, as well as searching for new particles and phenomena that can, for example, explain the existence of Dark Matter. The goal of the grant within which the present position is funded is to contribute to the ultimate construction of a deeper theory than the Standard Model theory of the elementary interactions that would help us understand the history of the Early Universe.

The Bergen group searches for new particles in decays containing tau-leptons, or that have been produced in association with a Higgs-boson decaying to two tau-leptons. This project will concentrate on the study the decay of the Higgs-boson to two tau leptons in more detail, as this decay channel offers unique possibilities to study the properties of the Higgs-boson, e.g. its CP-properties. The goal, in addition to a measurement, is to determine ultimate sensitivity of the LHC to the CP of the Higgs boson. This goal will be realised in a close collaboration with the theory group in Warsaw.

Qualifications and personal qualities

- The applicant must hold a master's degree or the equivalent in subatomic physics, or must have submitted his/her master's thesis for assessment prior to the application deadline. It is a condition of employment that the master's degree has been awarded.
- Experience from analysing data from a particle physics experiment is an advantage.
- Applicants must be able to work independently and in a structured manner and demonstrate good collaborative skills.
- Applicants must be proficient in both written and oral English.
- Good command of the Norwegian language is an advantage.

Personal and relational qualities will be emphasized. Ambitions and potential will also count when evaluating the candidates.

About the PhD position and research training

As a PhD candidate, you must participate in an approved educational programme for a PhD degree within a period of 3 years. The deadline for applying for admission to the PhD programme at The Faculty of Mathematics and Natural Sciences is 2 months after you start your position or after the start of the research project that will lead to the PhD degree. It is a condition that you satisfy the [enrolment requirements for the PhD programme](#) at the University of Bergen.

We can offer

- A good and professionally stimulating working environment
- Salary at pay grade 54 (Code 1017/Pay range 20, alternative 10) in the state salary scale. This constitutes a gross annual salary of NOK 479 600,-. Further promotions are made according to length of service in the position.
- Enrolment in the Norwegian Public Service Pension Fund
- Good [welfare benefits](#)

Your application must include

- A brief account of the applicant's research interests and motivation for applying for the position
- The names and contact information for two reference persons. One of these should be the main advisor for the master's thesis or equivalent thesis
- CV
- Transcripts and diplomas showing completion of the bachelor's and master's degrees. If you have not yet completed your master's degree, please submit a statement from your institution confirming that the master's thesis has been submitted
- Relevant certificates/references
- A list of any works of a scientific nature (publication list)
- Approved documentation of proficiency in English (if required, cf. [English language requirements for PhD admission](#))
- A list of any works of a scientific nature (publication list)

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge.

General information:

Detailed information about the position can be obtained by contacting: professor Anna Lipniacka (Anna.Lipniacka@uib.no) or professor Bjarne Stugu (Bjarne.Stugu@uib.no)

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

The successful applicant must comply with the guidelines that apply to the position at all times.

For further information about the recruitment process, click [here](#).

Life as a PhD candidate at UiB

Marion Claireaux tells about life and work as a PhD candidate at UiB.

Video: <https://www.youtube.com/watch?v=nrt6VxMeJ4&index=2&list=PLf8ZlYfAO0qjhROtj6SthDbSScg0ISO6G>

About The University of Bergen

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are seven departments and several centres at Faculty of Mathematics and Natural Sciences. [Read more about the faculty](#) and [departments](#).

Jobbnorge ID: 193839, Deadline: 27.10.2020, Customer reference: 2020/10677