Master degree scholarship – experimental neutrino physics

Competition opened on: 20 June 2018
Application submission deadline: 30 August 2018

NCBJ is inviting students of physics to apply for 12 month-duration scientific scholarship in the OPUS-2016/21/B/ST2/01092 project financed by National Science Center (NCN). The student is expected to complete his/her master degree thesis in elementary particle experimental physics during that time.

Only persons who meet the requirements specified by NCN in the *Regulations of issuing study grants for young scientists* (in Polish), see https: //www.ncn.gov.pl/sites/default/files/pliki/regulamin-przyznawania-stypendiow.pdf are eligible to apply.

The project is currently under accomplishment by Warsaw Neutrino Group (http://neutrino.ncbj.gov.pl) in cooperation with a group of theoreticians from the Wrocław University. Participation in T2K international experiment (http: //t2k-experiment.org/t2k/) research dedicated to detection of low momentum protons, which are in great interest for search of new type neutrino interactions with correlated nucleon pairs. Within this project student will analyze the beam test data and MC simulation collected this summer during beam tests of the prototype of scintillator detector at CERN. This detector is going to be used for upgrade of the near detector of T2K (located 280m from the neutrino production point) in 2020. It is expected that student will collaborate within a group of European and Japanese scientists involved in the design of the new detector. It will require to regularly present progress of students work during meeting of that team as well discussing results among local physicists in Warsaw Neutrino Group.

Requirements:

- Master degree course student in elementary particle physics;
- Documented experience in analysing elementary particle physics or nuclear physics experimental data;
- Familiarity with neutrino physics (in particular the T2K experiment), especially with design and operation of scintillator detectors used for measurement of neutrino interactions;
- International team work skills;
- Good command of spoken and written English;
- Knowledge of Unix/Linux operating system, C++ programming language, ROOT software package;
- Good communication skills, autonomous responsibility.

Documents:

- CV with description of scientific background (please insert consent for processing your personal data for the recruitment purposes: „Wyrażam zgodę na przetwarzanie moich danych osobowych dla potrzeb niezbędnych dla realizacji procesu rekrutacji (zgodnie z ustawą o ochronie danych osobowych z dnia 29.08.1997 r. Dz. U. Nr 133, Poz. 883”) ;
- Motivation letter with description of scientific interests;
- Exam records transcript;
- Bachelor degree diploma copy;
- College tutor recommendation letter;

- All other documents possibly relevant for candidate evaluation.

Scholarship:
The scholarship in the amount of 750 PLN monthly will be paid for 12 months.

The scholarship is available immediately.

Contact person:
dr Joanna Zalipska
Narodowe Centrum Badań Jądrowych
ul. Hoża 69, 00-681 Warszawa
email: joanna.zalipska@ncbj.gov.pl

Send your application before 30 August 2018:
- by e-mail to: joanna.zalipska@ncbj.gov.pl
- or by surface mail to the address:
  Joanna Zalipska
  Narodowe Centrum Badań Jądrowych, BP3
  ul. Hoża 69
  00-681 Warszawa
- by person: in secretiariat of High Energy Physics Division, BP3.

Selected applicants will be invited for interviews by e-mail.
The competition will be concluded around September 19, 2018.