

INTERNSHIP for the HighNESS Project

Institute Laue-Langevin | Grenoble, France

Position reference: NPP_4



NEUTRONS
FOR SOCIETY

DETAILS

PROJECT

HighNESS

The European Spallation Source (ESS) is a neutron research facility that is currently under construction in Lund, Sweden and designed to be the most powerful neutron source in the world. The aim of the HighNESS project, funded by the EU, is the "Development of a High Intensity Neutron Sources at the ESS", and enhance the intensities of cold, very cold and ultra-cold neutrons (CN, VCN and UCN) for future applications in fundamental physics and condensed matter research.

JOB DESCRIPTION

Activities

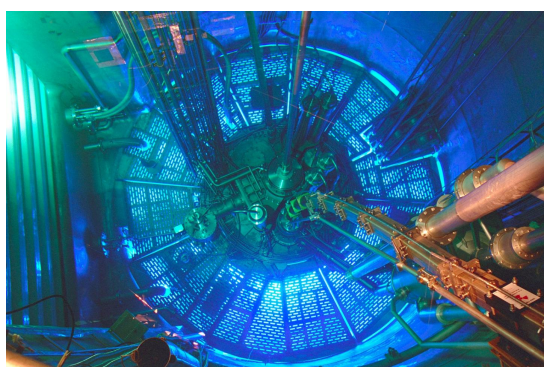
In accordance with their profile the candidate will take part in activities related to the HighNESS project that will include either:

- Monte-Carlo Simulation of neutron transport from the moderator to the experimental areas
- Study of neutron optical devices (e.g Wolter optics, nested mirror geometries)
- Testing and development of components for neutron scattering and transmission experiments
- Analysis of data from neutron scattering experiments

LOCATION

The Institut Laue-Langevin

Situated within the European Photon and Neutron (EPN) science campus, the ILL is home to the most intense continuous neutron flux in the world. The international research facility is funded and managed by France, Germany, and the United Kingdom, in partnership with 11 other European countries.



Cherenkov radiation in the reactor pool at the ILL.

DURATION

Three to six months in 2022

BENEFITS

monthly allowance starting at 550 €

depending on duration and qualification

Housing support

French language courses

REQUIREMENTS

English-speaking

"Hands-on" mentality

Minimum two years of physics

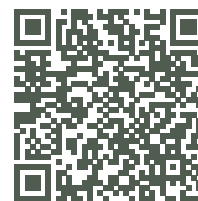
Programming experience:

Python necessary

C++ desirable

HOW TO APPLY

Applicants should contact
Dr. Richard Wagner: wagnerrichard@ill.fr.



Additional information may be found at
<https://www.ill.eu/careers/>.