

Beneficiaries staff to be seconded to the NBTF & R&D project team in Garching/Germany

Physicist for beam diagnostics of the Neutral Beam Ion Source

Job Description

As a member of the Neutral Beam Injection (NBI) team at Max-Planck Institute for Plasma Physics (IPP) Garching, the job holder will participate in the experiments of the RF-driven negative ion source at the test facilities BATMAN Upgrade and ELISE that are an essential part of the European step ladder approach towards ITER NBI. He/she will be responsible for planning, operating and analysing beam diagnostics at BATMAN Upgrade. The work will be performed in Garching together with the IPP-NBI team. Strong collaboration with the NBTF team and related experiments is requested.

Functions/ Responsibilities

- To actively participate in the experiments of the test facilities BATMAN Upgrade and ELISE
- To operate and maintain the beam diagnostics installed on the test facility BATMAN Upgrade and comparison to ELISE data
- To contribute to the experimental programs for systematic measurement of beam properties
- To further develop or upgrade the diagnostic systems
- To summarize the results and to present them in meetings, conferences and reports
- To collaborate with other European partners working in the same field, in particular a close collaboration with NBTF

Qualifications and experience

- PhD degree in Physics or equivalent fields
- Experience in beam diagnostics of hydrogen beams
- Experience in beam emission spectroscopy, calorimetry and/or IR thermography

Knowledge, skills and abilities

- Very good knowledge of beam physics
- Good knowledge of negative ion source and beam physics, and technology is beneficial
- Good knowledge of data acquisition systems, data evaluation and visualization
- Good organizational, interpersonal and communication skills, high competence in team working

Date of vacancy: January1, 2025

Contact: Prof. Ursel Fantz, ursel.fantz@ipp.mpg.de