

**Research Scientist or Postdoctoral Researcher in Neutron Scattering
Software
China Spallation Neutron Source,
Institute of High Energy Physics,
Chinese Academy of Sciences, Dongguan, China**

Located in Dongguan China, the China Spallation Neutron Source (CSNS) is a newly operational user facility that is open to the world. With the first batch of three neutron instruments entering the user service phase in 2018, seventeen additional instruments are currently under construction or in the conceptual design phase. A scientific software developer position within the data analysis group is now available for application. The duration of this position is 2 years for postdoc and permanent for scientist. The position is expected to satisfy our increasing demand on neutron scattering modelling and data analysis activities, and contribute to international software projects such as NCrystal, McStas, Geant4 and Mantid. Researchers with software development expertise, especially from neutron and x-ray scattering, high energy physics and nuclear science communities, are encouraged to apply.

Job description: Responsibilities for this position:

1. As a core member of the NCrystal team, develop neutron inelastic and small-angle scattering models (<https://github.com/mctools/ncrystal/wiki>). Participate in the neutron experiments carried out for the validation of the developed numerical models.
2. Participate in the neutron data analysis software development.
3. Use NCrystal-enabled Monte Carlo packages to simulate instrument of interest, and provide simulated detector DAQ data stream for the subsequent data analysis procedure.

We provide,

1. State-of-the-art computational infrastructure and access to a world-class neutron facility.
2. Competitive salary, health insurance, pension plan and inexpensive company accommodation. In 2019, the yearly gross salary for a postdoc is about 400k RMB (approximately 53k Euros). The salary for a research scientist depends on qualification and experience.
3. 140 hours/year employee self-organising education and training
4. Clear career path.

Requested (Profile Essential):

1. The applicant must have obtained a PhD in physics, math or related field prior the time of this employment
2. Basic understanding of neutron or x-ray scattering theory
3. Proficient with at least one compiled programming language
4. Interest in scientific software development
5. Good English communication and writing skills
6. Minimum 2 years postdoc experience for the scientist position applicants

Desired:

1. Strong background knowledge in neutron or x-ray scattering
2. Experienced in object-oriented design and scientific software development
3. Experienced in data analysis for physics experiments

How to Apply

This position will be filled on a continuous basis and will remain open until filled. Interested candidates should email their CV along with a cover letter, to Dr. Xiao-Xiao Cai ([caixx\[at\]ihep.ac.cn](mailto:caixx[at]ihep.ac.cn)).