PhD student

The Laboratory for Neutron Scattering and Imaging at the Paul Scherrer Institut is looking for a PhD student fr research on quantum critical phenomena in metals with competing interactions

Your tasks

Quantum materials are a class of solids in which quantum mechanical effects are especially apparent, generating novel states of matter with a plethora of yet unexplored properties. You will conduct research on metallic materials hosting unconventional quantum fluctuations, which are predicted to give rise to some of these ambiguous quantum phenomena. You will study the microscopic interactions among the relevant degrees of freedom using muon spin rotation, x-ray and mainly neutron scattering techniques.

Your profile

You have a Master degree in physics, chemistry, material sciences or related field, preferably with experience in condensed matter physics, magnetism and/or scattering techniques. You have an active interest in planning, performing, analyzing and interpreting research experiments. You are able to work independently in a collaborative and interdisciplinary team and have good communication skills in English.

We offer

Our institution is based on an interdisciplinary, innovative and dynamic collaboration. You will profit from a systematic training on the job, in addition to personal development possibilities and our pronounced vocational training culture. The unique working environment at the Paul Scherrer Institut is designed to provide excellent training for a future career as independent researcher, while conducting research of internationally recognizable impact.

For further information, please contact Dr. Daniel Mazzone, phone: +41 56 310 5230, email: daniel.mazzone@psi.ch