

Open PhD position at the Laboratory for Muon Spin Spectroscopy, Paul Scherrer Institute, Switzerland

The Paul Scherrer Institute PSI is the largest research centre for natural and engineering sciences within Switzerland. We perform cutting-edge research in the fields of matter and materials, energy and environment and human health. By performing fundamental and applied research, we work on sustainable solutions for major challenges facing society, science and economy. PSI is committed to the training of future generations. Therefore about one quarter of our staff are post-docs, post-graduates or apprentices. Altogether PSI employs 1900 people.

The Laboratory for Muon Spin Spectroscopy (LMU) is a division of the PSI department Research with Neutrons and Muons (NUM) which operates large-scale user facilities for materials sciences. For a highly topical research project funded by the Swiss National Science Foundation (SNSF) we are looking for a

PhD Student

Novel forms of coexistence, competition and coupling of magnetism and superconductivity

Your tasks

The project aims to explore new routes to couple the basically antagonistic ground states magnetism and superconductivity, to further the fundamental understanding of unconventional superconductivity, and to investigate materials with new functionalities. Within an international team of highly motivated and experienced researchers you will experimentally study the magnetic and superconducting properties of recently discovered iron-based materials with muon spin rotation and relaxation as the main method of investigation which will be complemented by neutron scattering and macroscopic characterization techniques. You will be located at the PSI and will be registered as PhD student at the University of Zurich under the supervision of Prof. Dr. E. Morenzoni.

Your profile

Excellent qualifications with a university degree (Master or equivalent) in physics, materials sciences or a similar subject are required. Knowledge of magnetism, superconductivity and general solid state physics as well as the prior use of a local probe technique like NMR or Moessbauer spectroscopy would be of benefit. A high proficiency in spoken and written English is a mandatory requirement. You should enjoy experimental work in an international collaboration and have a flexible approach working between different laboratories at the Paul Scherrer Institute.

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. If you wish to optimally combine work and family life or other personal interests, we are able to support you with our modern employment conditions and the on-site infrastructure.

For further information please contact Prof. Dr Elvezio Morenzoni, phone +41 56 310 36 70 or Dr Hubertus Luetkens, phone +41 56 310 44 50.

Please submit your application online (including addresses of referees) for the position as a PhD Student (index no. 3500-00) on the following webpage: <http://www.psi.ch/pa/offenstellen/1037>