



Postdoctoral Researcher Position (F/M) - Collective modes in Quantum Electronic Orders

Job description

The Condensed Matter Department of the Néel Institute/Grenoble has an opening for a postdoctoral associate to work on the collective modes of quantum electronic orders, such as superconductivity and charge-density-wave, by Raman spectroscopy, in the context of funded ERC project Higgs². The successful candidate will work on bulk compounds, such as superconductors with unconventional electronic and structural properties, for the quest and the study of their collective modes, notably with analogy with high energy particles (Higgs physics).

The postdoctoral scientist will conduct experimental research using Raman spectroscopy under extreme conditions, at low temperature and under high pressure, mainly using diamond anvils cell, on a unique set-up, and under very high magnetic field (in large facilities, in Europe). The successful candidate will be involved in the improvement of the in-lab set-up to reach unprecedented range of conditions.

Our offer

You will be appointed on a fulltime position for one year (13 months) with possible extension on a recently funded Consolidator ERC project at the Néel Institute up to 3 years. The laboratory offers a dynamic ecosystem with enthusiastic colleagues in a stimulating scientific environment.

The **post-doc salary** is between € 2.663 and € 3.783 gross per month depending on experience and qualifications.

Initial contract: 13 months (with the possibility of an extension on ERC funding, for a total of 3 years)

Place and Infrastructure

The Néel Institute: The Néel Institute is one of the largest French national research institutes for fundamental research in condensed matter physics enriched by interdisciplinary activities at the interfaces with chemistry, engineering and biology. It consists of 450 employees, including 175 researchers. It is located in the heart of a unique scientific, industrial and cultural environment, right next to the French Alps. The research will be conducted in the experimental group of Dr. Marie-Aude Méasson, part of a large team “*MagSup*” (Magnetism and Superconductivity – 50 members) which is focused on fundamental questions in Condensed Matter systems thanks to state-of-the-art experiments.

Your profile

The candidate must have the ability to conduct self-directed research, mentor graduate students and support PhD students, and work collaboratively with academic team members in related fields. He/she has strong interest in enabling science through the development of state-of-the-art instrumentation.

Requirements:

A promising candidate possesses a Ph. D. degree in condensed matter physics with a sound background of quantum orders/strongly correlated physics. Skills in delicate experiments under extreme conditions (low temperature/High pressure/high magnetic field and/or spectroscopy) are requested.

The ability to perform innovative and effective research in condensed matter evidenced by a strong publication record (commensurate with stage in career) in peer-reviewed journals or pre-prints. Evidence of ability to work independently, and as an active collaborative member of a research team, who is well organized and self-motivated, while working cooperatively at all levels. He or she is expected to communicate project results in conferences and write scientific manuscripts. Good command of English (both verbal and written) and demonstrated ability to disseminate scientific results are mandatory requirements for the position.

Information and Application

The CNRS is an equal opportunity and affirmative action employer and encourages applications from women.

To apply, please send the following documents as PDF file (all document in English):

- (1) Letter of motivation including relevance for the post-doctoral project
- (2) CV including full list of publications and communications
- (3) Contact details of at least two referees (or letters of recommendation, if already available)

The deadline for applications is 1st of April 2022, but the position will be filled as soon as a suitable candidate is identified. For additional information, kindly contact Dr. Marie-Aude Méasson (marie-aude.measson@neel.cnrs.fr).

The application is to be submitted directly on the website: <https://bit.ly/3ts1Z5v>