UNIVERSITÉ DE GENÈVE
FACULTÉ DES SCIENCES
Département de physique de la matière condensée

PhD POSITION
at
University of Geneva
Department of Condensed Matter Physics & Department of Applied Physics
Group of Applied Superconductivity

The group of Applied Superconductivity offers a PhD position to investigate the mechanisms for engineering the superconducting properties of MgB_2. Today MgB_2 is moving towards an ever-expanding target of applications in cryogen-free environment. Nevertheless, the performance required by most applications in devices is not yet achieved in commercial MgB_2 conductors. The project goal is to close the gap between intrinsic high potential of the material and present state of the conductor technology by designing and mastering new processing routes.

The work will be done in the laboratories of Prof. Senatore and Dr. Giannini, that are fully equipped for material synthesis, wire fabrication and for all kinds of characterization of the superconducting properties, including electromagnetic properties, calorimetry and thermal conductivity in magnetic fields as high as 21 T. The activity will also benefit from the proximity to the other research groups in the Department of Condensed Matter Physics, that have top-level expertise in many different relevant areas, including crystal growth, crystal chemistry, optical and local-probe spectroscopy.

We are looking for a bright and highly motivated candidate, with a Master of Science degree in Applied Physics, Fundamental Physics, or Material Science awarded by an internationally recognized university-level institution. We will consider a candidate who during the BSc MS programs have acquired good knowledge in at least one of the following areas: low temperature physics (covering at least electrical transport or magnetic measurement techniques) or material processing and crystal chemistry. Good English writing and speaking skills are required. The position is limited to 4 years with a year trial period.

Please send resumes and any pertinent information to:

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