



In the group of Spin Orbit Interaction Spectroscopy (SOIS), part of the Laboratory for Topological Matter at the Ecole Polytechnique Fédérale de Lausanne we offer a

PhD position in experimental condensed matter physics

Measurement of the time scale of quantum mechanical processes

The project:

In our group at the EPFL, and in strong collaboration with the Paul Scherrer Institut, we are offering a 4 year PhD position. The aim of the project is to determine the fundamental time scale of the photoemission process, as an example of a quantum mechanical process. It will be of particular interest to measure how this time scale, which is of the order of tens of attoseconds, depends on correlation effects. Finally this might lead to a better understanding of the nature of time itself.

We offer an international work environment with access to some of the most advanced experimental equipment and collaborations with theory and experimental groups around the world. Further development in the form of specialised lectures, doctoral schools, conferences, and interaction with experienced researchers is explicitly foreseen. This full-time position will directly be supervised by Prof. Hugo Dil.

Requirements:

Successful applicants should have:

- Undergraduate degree in physics
- Strong command of quantum mechanics and a good understanding of solid state physics
- Good communication skills, fluency in written and spoken English
- Dedication to the project, an open mindset, and the tendency to think out-of-the-box

How to apply:

Interested applicants should directly contact Prof. Hugo Dil. Applications should contain a motivation letter formulating the interest in the project, a comprehensive CV including a list of the relevant courses attended, and contact information of two referees. The application process is expected to remain open until end of June 2021, or until a suitable candidate has been found.

Contact details:

Prof. Dr. Hugo Dil

email: hugo.dil@epfl.ch

website: www.epfl.ch/labs/ltm/