

Marie-Curie PhD position in optical frequency metrology

Company: University of Neuchâtel (UniNE), Time and Frequency Laboratory (LTF)

Workplace: Neuchâtel, Switzerland

Description: UniNE-LTF research fields include time and frequency metrology, atomic frequency standards (e.g. compact rubidium clocks for space applications), high frequency stability lasers in the near- and mid-infrared spectral regions and ultrafast lasers for optical frequency combs.

UniNE-LTF has an **open PhD position** in the field of optical frequency standards and optical metrology. The research concerns the development, characterization and stabilization of alternative technologies of optical frequency combs, as well as the development of stabilized lasers in the mid-infrared spectral range.

This research activity will first be realized in the frame of the Marie-Curie International Training Network (ITN) FACT ("Future Atomic Clock Technology") that involves 14 academic and industrial partners in the field of optical atomic clocks. In this frame, the PhD student will have the opportunity to participate in some joint training events and will make a secondment at another partner's place. Then the PhD student will be involved in other research projects developed at UniNE-LTF on related topics.

The applicants shall demonstrate a strong interest and good aptitudes for experimental work, whereas being interested in the theory of the considered phenomena.

Education and expertise: A master degree in physics is required, some practical experience in optics, lasers, molecular spectroscopy or stabilization electronics is strongly desired. Good language skills in English are necessary, a basic knowledge of French is desirable.

Start: rapidly

Special conditions: The candidate should not have spent more than 12 months in Switzerland in the last 3 years.

Duration of appointment: up to 4 years in total, first 9 months in the frame of the Marie-Curie ITN FACT.

Applications including (1) a letter of motivation, (2) a CV, (3) a copy of the diploma and grades, (4) a list of publications if applicable, and (5) the name and contact information of at least two references (alternatively two letters of recommendations) should be sent to job.ltf@unine.ch. Please refer to the title of this advertisement in the application.

Website: <http://www2.unine.ch/ltf/>

Keywords: optics, time and frequency metrology, frequency standards, optical frequency combs, mid-infrared lasers.