An e-infrastructure centre of excellence for software, training and consultancy in simulation and modelling funded by the European Union.

Post-doctoral Fellowship at EPFL

Applications are invited for a 2-year post-doctoral position based at CECAM Headquarters at EPF-Lausanne (www.cecam.org) to work in the area of computational methods for quantum dynamics. The position is associated with the E-INFRA5 Centre of Excellence **E-CAM** (www.e-cam2020.eu), and in particular with the work in Work Package 3 *Quantum Dynamics*. The position is available immediately.

The research will focus on developing and testing methods and algorithms relevant for quantum computing. Two main lines of inquiry will be pursued: (1) the development of algorithms for implementation of the Multi-Configuration Time Dependent Hartree (MCTDH) approach to quantum dynamics on a quantum computer; (2) the development and comparison of wave function and trajectory based methods for the study of open quantum systems. Software development and testing in collaboration with software engineers in E-CAM will be a major component of the work.

Applicants should have a PhD in Physics or Chemistry. A strong background in quantum mechanics and computer simulation of classical and/or quantum systems are required. Experience and proficiency in coding are essential. The candidate will be based at CECAM Headquarters in Lausanne and will work in close collaboration with S. Bonella (CECAM EPF-Lausanne), I. Tavernelli (Zurich IBM Research Laboratories), G. Worth (University of Birmingham) and an E-CAM software engineer based at La Maison de la Simulation in Paris.

Applications should be sent to Sara Bonella (sara.bonella@epfl.ch), providing an up-to-date CV, a letter of motivation, and the names and contact details of at least two academic referees.

Informal enquiries may be directed to sara.bonella@epfl.ch.