Post Doctoral position at the Laboratory of Computational Science and Modelling, EPFL

A 1 year post-doctoral research position, renewable for one more year, is available at the Laboratory of Computational Science and Modelling at EPFL starting from May 2016, within the framework of the ERC Starting Grant project "HBMAP".

The project aims at unravelling the relations between molecular-scale building blocks and the emergence of meso-scale complexity, by using machine-learning analysis of state-of-the-art atomistic simulations. Novel, data-driven algorithms will be developed, implemented, and applied to predict and rationalize the behaviour of materials and molecules, with a particular emphasis on hydrogen-bonded systems.

The applicant should have a Ph.D. in a related subject, a strong publication record, ability to speak and write effectively in English, be creative, independent and a good team player. A background in atomistic modelling with a strong experience in programming is preferable (ideally with some C++ and/or Python expertise), and an interest in following the development of simulation techniques from the blackboard to the application to challenging materials problems. Previous experience with molecular dynamics, enhanced-sampling techniques and/or machine-learning techniques would be highly appreciated. Candidates with a background in more general applications of machine-learning will also be considered.

EPFL provides a thriving, international, English-speaking working environment with a strong inter-departmental expertise in computational materials modelling. It offers very attractive employment conditions, with a highly-competitive salary that will be determined depending on the level of experience.

Applicants are invited to follow the instructions on http://goo.gl/zQNHvy to prepare their application. A first round of applications will be evaluated by January 31st 2016.