

The institute of Computational Science at the University of Lugano (<http://ics.usi.ch/>) invites applications for **postdoctoral research positions** in the area of computational mathematics. The research positions are part of the Swiss HP2C-initiative (High-Performance and High Productivity Computing Initiative, www.hp2c.ch). The successful applicants will work in close collaboration with researchers in Switzerland and world-wide. The areas of focus of these positions include:

- Development, analysis and implementation of parallel numerical methods for high performance computing
- Actively collaborating with the HP2C applications development teams and the groups at ICS
- Publishing papers in high-quality refereed conferences and journals.

The candidates should meet the following requirements:

- A master or diploma and doctoral degree in mathematics, computer science or related disciplines with a strong focus on scientific computing/computational sciences
- Strong background in High Performance Computing and/or Computational Mathematics
- Fluency (written and oral) in English

Knowledge in the following areas is welcome

- (massively) parallel computing
- (nonconforming) domain decomposition techniques
- adaptive methods (e.g. adaptive finite elements)
- nonlinear and inverse problems
- state of the art solution and discretization methods
- hierarchical methods, wavelets, multipol
- programming experience with C/C++ and MPI
- mathematical modeling and numerical analysis
- multi core chips, concurrency-supporting languages and hardware specific languages

Applications should be sent by e-mail to decanato.inf@usi.ch.

Including the following documents:

- a complete CV.
- a journal article published or under submission.
- a letter stating the reasons of your interest and your competences in the field.

Position will be for a three years term at standard conditions for postdoctoral fellows at USI.

Applications will be accepted until the positions are filled. Applications submitted until **May 31, 2010**, will be treated with higher priority. Owing to the large number of enquiries expected, only those applicants whose profiles are likely to fit the positions will be notified for further details and eventual interviews.

For additional information, please contact rolf.krause@usi.ch