

Application
deadline
15/08/18
Start date
Early 2019



Fully funded Industrial PhD Fellowship in Flood Risk Science

Apply for a PhD Fellowship in Flood Risk Science! Fully funded by the Luxembourg National Research Fund (FNR) in collaboration with the University of Bologna (Italy) and RSS-Hydro Sàrl-S (Luxembourg).

The successful candidate will be a registered PhD student at the University of Bologna and will spend at least 25% of the time in Luxembourg at RSS-Hydro Sàrl-S, a private research institute focusing on remote sensing of floods and modeling of hydrodynamics.

Under the supervision of

Dr. Alessio Domeneghetti @ UniBo

<http://www.dicam.unibo.it/en/Department>

Dr. Guy Schumann @ RSS-Hydro

<http://www.rss-hydro.lu>

Partner

Fathom Global (UK): <http://www.fathom.global>

RESEARCH TOPIC (TBD)

Flooding is becoming the costliest natural disaster in terms of insured and uninsured losses. Highly advanced economies such as many countries in Europe are not safe, in fact, many of those countries suffered enormous losses in properties and other assets during recent floods. Generally speaking, low prediction accuracy of models, in particular across regional scales, poor quality of open-access datasets, lack of adequate exposure and vulnerability data as well as lack of preparedness and oftentimes inadequate policy measures are to blame. In parallel but oftentimes happening unrelated, the world of IoT (Internet of Things) and interoperable geospatial information is becoming much smaller due to a proliferation of open-access Earth Observation (EO) data from public space agencies and, in some cases, from private companies and due to computer models now becoming available either as freeware or open-source codes. Yet, mapping, modelling and predicting everywhere at various scales whilst accounting for local impacts and assets at risk is still extremely challenging. This challenge is exacerbated in regions of high-varying topography and in locations where hazard and risk need to be resolved at resolutions much finer than those of globally-available datasets. Such is the case for Luxembourg and this PhD will attempt to resolve many of the existing challenges in flood risk mapping and modelling.

CANDIDATE PROFILE

Applicants are expected to have a degree in Civil/Environmental Engineering, Geography or a related subject. Candidate is expected to be highly motivated with a training in modelling, hydrology or ecology, attracted by ecosystem functioning and interdisciplinary approaches. Ideal candidates should have proper computing, analytical, and communication skills.

CONTRACT CONDITION

In case of financing by FNR the position offered is for a fixed-term period of 1+3 years (approx. 32 000 Euro gross per annum).

Application must include: CV and a brief account of the applicant's research interests and motivation.

For more information and application, please contact

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Dr. Guy Schumann: rss-hydro@outlook.com