

## **Postdoctoral Position + PhD Positions at the University of Cape Town**

The *African Institute of Financial Markets and Risk Management* (AIFMRM) in the Faculty of Commerce at the University of Cape Town is a newly founded graduate institute committed to increasing the extent and depth of expertise in the African financial service industry. The institute is committed to rigorous scholarly research and takes a critical and quantitative approach to the study of financial markets and risk management. AIFMRM is inviting applications for one Postdoctoral Researcher and two PhD Students with an active research interest in agent-based modelling and financial network analysis. Application deadline is **15 December 2014** and appointments are for as soon as is feasible.

### *Requirements & Application – Postdoctoral Researcher*

We are looking for someone with a completed dissertation in economics, finance, computer science, or a closely related field who has demonstrated the potential for excellent scholarly work. While our goal is to involve the Postdoctoral Researcher in a research project on an agent-based model of the financial system, he/she will also have the opportunity to follow his/her own research agenda as well. Interaction with our graduate students is strongly encouraged, but the position does not have any teaching or administrative obligations. We offer a one-year contract with the option of an extension for another year. The annual remuneration of R240,000 is paid as a fellowship (i.e. there are no taxes) and allows a comfortable lifestyle in Cape Town. A reasonable research budget, e.g. for conference travel, publication costs, and research assistants, is available.

To apply, please send your CV, up to three samples of your work, and a letter of motivation to [cogeorg@gmail.com](mailto:cogeorg@gmail.com).

### *Requirements & Application – PhD Student(s)*

We are looking for up to two enthusiastic PhD students with a Masters in economics, finance, mathematics, computer science, or closely related fields, who have an interest in agent-based modelling and financial networks. We offer a three-year fully funded fellowship of R180,000 per annum. A series of PhD-level courses in the broad area of financial risk management and financial economics is offered to supplement Master-level courses. Some travel funding is available, e.g. for conference travel and publication costs. We encourage and actively support PhD Students to undertake internships either in the financial industry or with regulatory authorities and central banks during their PhD.

To apply, please send your CV, a transcript of your degree, and a letter of motivation to [cogeorg@gmail.com](mailto:cogeorg@gmail.com).

### *Background information on AIFMRM and the University of Cape Town*

While AIFMRM is newly established, the closely connected MPhil specialising in Mathematical Finance at the University of Cape Town is the continent's leading quantitative finance program and has been successfully running for many years. Driven by the high demand for quantitatively oriented finance professionals, AIFMRM was established in 2014 and is supported by strong partners from the financial industry and government. One of our focus areas is the analysis of systemic risk using a

variety of approaches, including agent-based models. Through close ties to Deutsche Bundesbank and the South African Reserve Bank we have access to uniquely detailed, bank-level supervisory data that can be used to inform the next generation of financial agent-based models. Through this access we overcome one of the major obstacles in the literature and are building a small agent-based model that can be calibrated to real data in order to study the emergence of systemic risk and the effectiveness of macroprudential policy measures.

The University of Cape Town is South Africa's leading university and is continuously rising in international rankings, currently being ranked on the 141st place in the 2014/2015 QS World University Rankings. UCT offers a thriving research environment and is located in one of the prime vacation destinations in the world. Cape Town is amongst the safest cities in South Africa and offers a truly outstanding quality of life.

All further questions can be addressed to Co-Pierre Georg via [cogeorg@gmail.com](mailto:cogeorg@gmail.com).

