

**CALL FOR APPLICATION**  
**Postdoctoral Fellowship in Partial Differential Equations and Calculus of Variations**  
**At the African Institute for Mathematical Sciences (AIMS) in South Africa in cooperation**  
**the Technical University Berlin, Germany.**

The German Research Chair with specialization in **Partial Differential Equations and Calculus of Variations at AIMS South Africa**, Dr Marc Sedjro, in collaboration with the Communication and Information Theory Chair at TU Berlin, is offering postdoctoral positions at AIMS South Africa research Centre. These fellowships are made available and funded by the DAAD to promote international academics exchange as well as educational co-operation with developing countries through a variety of funding and scholarship programmes. These positions are made available to promote international academics exchange as well as educational co-operation with developing countries.

**Fellowship holders:**

Successful fellows are expected to conduct research and publish results in the thematic areas of Partial Differential Equations and Calculus of Variations. They are expected to be actively engaged in the research activities of the German Research Chair, contribute to the implementation of the cooperation between the Chair and the Communication and Information Theory Group at TU Berlin. Fellows are also expected to have some involvement in the AIMS South Africa academic programs.

**Scientific interests:**

The German Chair's research, at AIMS South Africa, revolves mostly around problems in Fluid Dynamics, games involving a large number of rational agents and optimal transport. The program will introduce postdoctoral students to some interesting and challenging problems such as the *Almost Axisymmetric Flows* arising in Meteorology, *Mean Field Games* and applications of the theory of optimal transport.

**Scholarship benefits:**

Fellowships are tenable for one year, contingent on satisfactory progress, and could be extended for a second year.

<b>Monthly rate</b>	1000 EUR (Monthly)
<b>Study and research allowance</b>	100 EUR (Monthly)
<b>Additional benefits*</b>	Possibility to do Short term research stays at the TU Berlin and at other AIMS Centres, health insurance

\*Additional benefits are made available for mobility when commencing and finishing the scholarship in South Africa and for research stay at TU Berlin (up to 3 months per year) during the course of the fellowship. Furthermore, the expenditure for the local health insurance is eligible for funding. Please, note that the fellowships cannot be held concurrently with any supplementary funding.

SPONSORED BY THE

**Contact:** For any questions, please email [sedjro@aims.ac.za](mailto:sedjro@aims.ac.za)

**Deadline:** The deadline for the application is **15<sup>th</sup> November 2020**.

**Start of the Scholarship:** As soon as possible

**Duration of the scholarship:** The Postdoctoral positions are tenable for 2 years, contingent on satisfactory progress.

**Eligibility:**

- Ph.D. degree in Mathematics (not more than 6 years from the starting date of the appointment)
- Interest in Partial Differential Equations and Calculus of Variations
- Academic excellence and track record in conducting research and projects
- Preferably a national of an African country

Females candidate and candidates from less privileged regions or groups are especially encouraged to apply.

**Application documents to submit:**

- Letter of motivation
- Curriculum Vitae (including list of publications)
- Copy of the PhD Certificate
- Research statement (maximum 2 pages)
- Copy of passport or national ID
- Two reference letters

Please, send completed applications to [sedjro@aims.ac.za](mailto:sedjro@aims.ac.za). Applicants should submit the documents in one single PDF file as “familyname\_firstname\_postdoc\_2020.pdf” (e.g. for applicant John Doe, the file will be named Doe\_John\_postdoc\_2020.pdf). The reference letters should be submitted directly by the reference writers to the emails above.

**For any questions, please email [sedjro@aims.ac.za](mailto:sedjro@aims.ac.za)**

**DISCLAIMER:** AIMS – South Africa reserves the right to disqualify ineligible, incomplete and/or inappropriate applications. AIMS also reserves the right not to make an appointment to the position as advertised or to extend the deadline for applications. Only successful applicants will be contacted.

SPONSORED BY THE