

## CALL FOR APPLICATION

### Postdoctoral Fellowship in Partial Differential Equations and Calculus of Variations At the African Institute for Mathematical Sciences (AIMS) in South Africa

The German research chair, [Dr Marc Sedjro](#), with specialization in Partial Differential Equations and Calculus of Variations at [AIMS South Africa](#), in collaboration with [the Communication and Information Theory Chair at TU Berlin](#), is offering Postdoctoral fellowships at AIMS South Africa research center in Cape Town. 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 programs.

#### Scientific interests:

The German Chair's research, at AIMS South Africa, revolves mostly around problems in Fluid Dynamics, games involving large number rational agents and optimal transport. More specifically, the Chair is interested in the *Almost Axisymmetric Flows* that arise in Meteorology, *Mean Field Games* and applications of the theory of optimal transport.

#### 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

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

#### Documents to submit for application:

- 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
- At least one reference letter

Please, send completed applications to both [joan@aims.ac.za](mailto:joan@aims.ac.za) and [sedjro@aims.ac.za](mailto:sedjro@aims.ac.za). Applicants should submit the documents in one single PDF file as "familyname\_firstname\_postdoc\_2021.pdf" (e.g. for applicant John Doe, the file will be named Doe\_John\_postdoc\_2021.pdf). The reference letters should be submitted directly by the reference writers to the emails above.

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### Scholarship benefits:

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

Scholarship instalment	1000 EUR (Monthly)
Study and research allowance	100 EUR (Monthly)

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. The positions are expected to **start in January 2022 or earlier if possible**. For any questions, please email [sedjro@aims.ac.za](mailto:sedjro@aims.ac.za)

### 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.

### Deadline:

The deadline for the postdoctoral fellowship application is **October 10, 2021**.

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.

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