



AIMS

African Institute for
Mathematical Sciences
NEXT EINSTEIN INITIATIVE

WE ARE CONTRIBUTING TO AFRICA'S SOCIO-ECONOMIC TRANSFORMATION THROUGH:



Innovative
scientific training

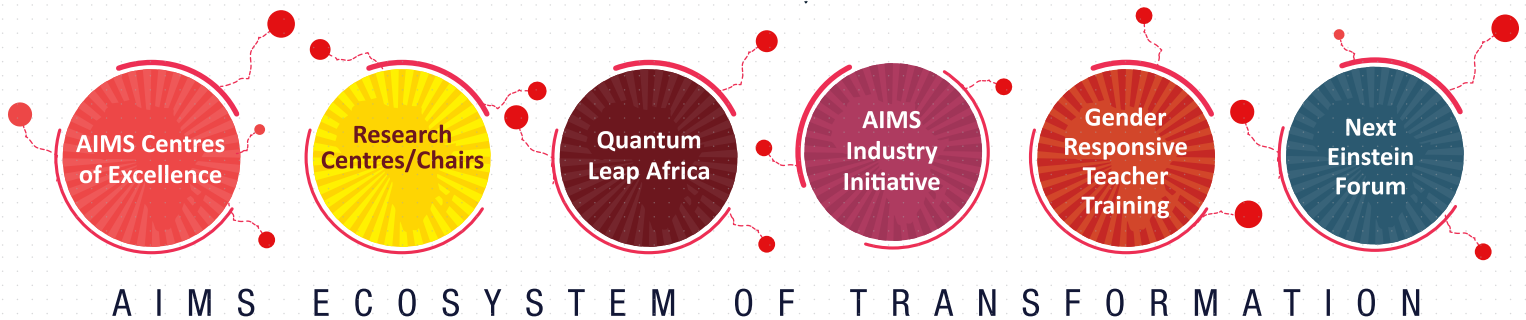


Technical advances
& discoveries

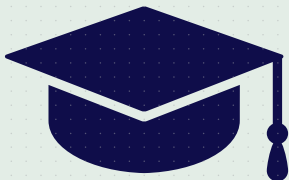


Public engagement for
the continent's scientific
emergence

HOW ARE WE DOING THIS?



PROFILE OF AIMS ALUMNI



OVER
2200
ALUMNI
FROM 43 COUNTRIES SINCE 2003

OVER
70%

OF OUR ALUMNI REMAIN
ON THE CONTINENT



FIVE FACTS ABOUT AIMS SENEGAL



**2ND CENTRE,
CREATED IN 2011**

356 STUDENTS GRADUATED,
84 STUDENTS (33% WOMEN)
FROM 12 AFRICAN COUNTRIES
CURRENTLY ENROLLED



**FULL SCHOLARSHIPS FOR
QUALIFIED STUDENTS**



INAUGURATED BY H.E. ABDOULAYE
WADE IN 2011 & VISITED BY
H.E. MACKY SALL IN 2013



HOSTED
OVER 196
RENOWNED PROFESSORS
FROM OVER 30 COUNTRIES

In Partnership with



@AIMSnext AIMS Next Einstein Initiative AIMS Next Einstein Initiative AIMS Next Einstein Initiative



AIMS

African Institute for
Mathematical Sciences
SENEGAL

A GLANCE AT AIMS SENEGAL PROGRAMS



MSc in Mathematical Sciences

AIMS Senegal offers a Master's degree in mathematical sciences, delivered under two streams:

A 10-month research-oriented Structured or classical program entailing course work, research and the oral defence.

An 18-month industry-oriented Co-operative (Co-op) Education program comprising course work, a work placement phase, research and the oral defence.

The AIMS Master's program provides a strong grounding in end-to-end skills, from problem formulation, estimation, prioritization, and generally applicable mathematical and computing methods in big data, computer security and financial mathematics, to clear and concise scientific report writing. Building on the Structured Master's program, the Co-op program allows students to apply their scientific knowledge to real-world problems. The AIMS Master's equips students with the necessary tools and confidence for policy analysis and decision-making. All AIMS students benefit from full scholarships, are selected through a rigorous application process and must have studied mathematics or related sciences for at least four years (4-year BSc or Master's I).



Skills for Employability

The Skills for Employability Program is contributing to finding solutions to development challenges in Francophonie Africa, by facilitating school-to-work transition for STEM students. During the five-year implementation phase, this program is targeting the following beneficiaries, 30% of whom are women: 200 Coop Master's students, 320 Post-AIMS Business Certificate (PAB) students (160 online and only women and 160 face to face), as well as 2,250 beneficiaries for the Massive Open Online Courses (MOOC) implemented in partnership with the African Virtual University and 13 other universities within the Francophonie region. Since inception, SFE has trained 117 students in Senegal under two cohorts of the Post-AIMS Business Certificate, 40% of whom are women.



African Master's in Machine Intelligence

In September 2018, AIMS launched the African Masters in Machine Intelligence (AMMI) at AIMS Rwanda, and subsequently AIMS Ghana (2019), with the support of Facebook and Google as well as the global AI community. Founded by Moustapha Cissé, Professor of Machine Learning and Lead of the Google AI centre Accra, Ghana, the goal of AMMI is to bring the best of AI education in Africa and contribute to building a healthy ecosystem of AI practitioners committed to making a positive impact on our societies. A novel fully-funded one-year intensive graduate program, AMMI provides brilliant young Africans with state-of-the-art training in machine learning and its applications, to respond to the present and future needs of Africa and the world. AIMS Senegal will host its first cohort of 42 AMMI students this 2020-2021 academic year.



Research Centre

Led by Prof Mouhamed Moustapha Fall and Funded by the Alexander von Humboldt Foundation and DAAD, its mission is to conduct and foster exceptional research as well as national and international collaborations. Since 2013, the research centre has welcomed more than 400 visitors to summer schools, winter schools, workshops, short research visits (1-2 weeks) and long-term research visits (2-4 weeks). The Research Centre has published more than 50 articles with more than 500 citations in internationally recognized peer-reviewed journals. With six PhD students and a postdoc researcher under his tutelage, in addition to 10 former students (eight Master's and four PhDs), Prof Fall's work spans the following fields: partial differential equations, geometric analysis, mathematical modelling of ecology and human harvest and shape optimization.

ALUMNI SPOTLIGHT



Dr. El Hadji Abdoulaye Thiam
(2012/2013 Cohort) – **Senegal**

After graduating from AIMS in 2012, El Hadji won a three-and-a-half-year scholarship from DAAD, to conduct PhD research at the AIMS Senegal Research Centre. In May 2018, he was one of the first two PhD researchers to defend at AIMS Senegal. In June 2018, El Hadji won the Ibni Oumar Mahamat Saleh prize for mathematics, awarded by the Centre International de Mathématiques Pures et Appliquées (CIMPA), and the Fondation de l'Université d'Orléans, France. He is currently a Post-doc researcher at AIMS Senegal.



Eunice Monyenye Omwoyo
(2018/2019 Cohort) - **Cameroon**

Prior to joining AIMS, Eunice earned a B.Ed in Mathematics and Physics from the University of Nairobi. Her passion for the universe led her to become a member of the Supernova Foundation, where she hopes to rise to the position of mentor to coach young girls. After graduating from AIMS in June 2019, Eunice gleaned a scholarship to pursue a PhD in Astrophysics, Cosmology and Gravitation at the Universidade Federal do Espírito Santo, Brazil.



Nneka Okolo
(2018/2020 Cohort) – **Nigeria**

Nneka recently completed a research stay at GERAD Montreal, on a "Reinforcement learning approach to an integrated production and distribution planning problem with inventory control under uncertain demand". Her research uses machine learning algorithms and stochastic control to provide reliable solutions for modern business environments characterized by high demand fluctuation, extensive supply chain networks and increasing customer expectations. Now Senior Analyst at Financial Derivatives Company Limited Nigeria, Nneka came to AIMS with a BSc in Applied Mathematics from the University of Benin.



Leclair Anjipu Mfoncha E
(2015/2017 Cohort) - **Kenya**

As a big data consultant at Smile Open Source Solutions, Côte d'Ivoire, Leclair uses predictive analysis and machine learning to determine the impact of change on complex products. A member of the pioneer Coop cohort, he gained admission into AIMS with a Master's I in Applied Mathematics and Computer Science from the University of Douala. Leclair describes his Co-op experience at AIMS Senegal as a milestone, where he gained professional experience by doing his internship at Atos, after which the company immediately hired him.

WE BELIEVE THE NEXT EINSTEIN WILL BE AFRICAN!

