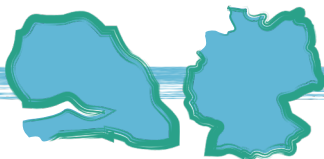


SPRING SCHOOL 2022

Senegal



Germany

A mathematical modelling perspective on ecology, biodiversity and blue economy

M'Bour, Senegal, from 30 May to 3 June 2022

The Spring School will be held at the African Institute for Mathematical Sciences (AIMS) in Senegal and is targeted at enthusiastic MSc and PhD students with a keen interest in applied mathematics, ecological and socioeconomic sciences. Advanced knowledge in mathematical or numerical disciplines is not required. The School will cover different topics, including:

- *ecological interactions* • *biodiversity* • *blue economy*
- *environmental change* • *marine resources*



Deadline for application: 20 March 2022



Apply now online:
<https://bit.ly/3GZu0Ey>



Here is a video from our past school: <https://bit.ly/3GHDUuk>



AIMS

African Institute for
Mathematical Sciences
SENEGAL



Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



Bundesministerium für
wirtschaftliche Zusammenarbeit
und Entwicklung

SPRING SCHOOL 2022

A mathematical modelling perspective on ecology, biodiversity and blue economy



M'Bour, Senegal, 30 May to 03 June 2022

Ecological resources, biodiversity, and blue economy are becoming crucial concepts for the development of sustainable ecosystems and a stable society. Knowledge of these concepts and familiarity with the related computational methods are a growing requirement. This Spring School will provide an opportunity for enthusiastic students to learn about these topics and the modelling techniques used to address fascinating ecological and socioeconomic problems.

The Programme

The School aims at exploring a number of concepts and methods around environmental sustainability and at introducing the concept of blue economy. The lectures will be based on practical examples, which are discussed and analysed using a set of modelling tools, such as differential equations and Agent – Based Modelling. The School will be based on the computer programming language python. The topics include: ecological interactions, biodiversity, climate regulation, environmental sustainability, and blue economy. An overview of the basic principles of mathematical modelling and the python language will smoothly introduce the students into the different topics. The School will be held at the African Institute for Mathematical Sciences (AIMS) in Mbour, Senegal. Prof. Dr Agostino Merico from the Leibniz Centre for Tropical Marine Research (ZMT), Bremen, will lead the learning process. **We are fully committed to offer equal opportunities for all applicants and we intend to promote diversity, inclusion and cultural exchange between students from German and African research institutions.**

Contact: workshopaimssn@aims-senegal.org

Pre-requisites & Costs

The School is aimed at enthusiastic MSc and PhD students from African and German academic or research institutions. Applicants should have a keen interest in computational sciences. Advance knowledge or background in mathematical disciplines or python is not required. All costs (including travel, accommodation, and food) will be covered for the selected students. The selection process will start right after the application deadline. Selection will be based mainly on student's motivation, which will be assessed from the half-page motivation letter and, if necessary, via personal or virtual meetings.

How to apply

Applications are welcome! The interested students can apply by filling out an online form and by uploading a letter of motivation (only half-page!) and CV in one single PDF.

 Apply now online: <https://bit.ly/3GZu0Ey>

 **Deadline for application: 20 March 2022**

