From Data to Impact

Advancing Climate Resilience in Africa Through Statistics and Mathematical Modelling · **ICMS Edinburgh, 2 to 6 November 2026**

Talk · Break · Lunch · Project work · Social · Welcome · Open slot

Monday 2 Nov

09:00 · 20 min
Registration

09:20 · 10 min

09:30 · 60 min
Dr Natasha Lalloo
An Introduction to The HE2AT Center and its Data

Coffee break

11:00 · 60 min
Prof Finn Lindgren
TBC

12:00 · 30 min
Assoc. Prof Mamadou Ndiaye
Contribution to spatial and functional statistics applied to predicting the spatial distribution of coastal demersal fish,

12:30 · 30 min
Dr Stephen Jun Villejo
Bayesian Spatio-Temporal Fusion of Weather-Station Observations and Numerical Weather Prediction Model

Lunch

14:00 · 30 min
Issa Mbénard Dabo
High-dimensional analysis of ridge regression for non-identically distributed data with a variance profile

14:30 · 30 min
Presentation of the three projects
Opportunity to form groups and begin project work

Coffee break

15:30 · 60 min
Project Work

16:30 · 30 min
Drinks reception

Tuesday 3 Nov

09:30 · 60 min
Prof. Sophie Dabo
TBC

Coffee break

11:00 · 30 min
Vusi Masingi
Assessing copula symmetry and tail dependence in multi-source temperature data from South Africa

11:30 · 60 min
Dr Patrice Brehmer
Fish Abundance Under Ocean Warming: Evidence from the Senegalese Shelf

12:30 · 30 min
Dr Johané Nienkemper-Swanepoel and Dr Raeesa Ganey ONLINE
Dynamic biplots to visualise temporal shifts in multivariate

Lunch

14:00 · 30 min
Dr Claudia Collarin
Beyond the Two-Step Process: Fully Integrated Feature Engineering in Multi-Parameter GAMs

14:30 · 60 min
Prof. Justice Moses K. Aheto
Bayesian spatiotemporal modelling and interactive web-based mapping of under-five malaria risk under the…

Coffee break

16:00 · 60 min
Project work

Wednesday 4 Nov

09:30 · 60 min
Assoc. Prof Conor Sweeney
An Introduction to Climate Models

Coffee break

11:00 · 60 min
Assoc. Prof Adam Sykulski
Environmental case studies in spatiotemporal statistical inference with covariates … rarely a straightforward linear…

12:00 · 60 min
Prof Samuel Manda
Spatial statistical modelling of climate-sensitive diseases and health burdens in Africa

Lunch

14:00 · 60 min
Dr Geoffrey Chiyuzga Singini
Predicting Climate-Driven Multiple Health And Social Burdens Through Time Series Modelling

15:00 · 30 min
Dr Ndague Diogoul
TBC

Coffee break

16:00 · 60 min
Project work

Thursday 5 Nov

09:30 · 30 min
Mendrika Rakotomanga
From object-based deep learning to an operational storm nowcasting system using satellite data across Africa

10:00 · 30 min
Jakub Pykowski
Fast and robust estimation of regression models with autocorrelated errors

Coffee break

11:00 · 30 min
Dr André Amaral
Statistical Methods for Heterogeneous Data, Informative Sampling and Probabilistic Prediction

11:30 · 60 min
Prof Inger Fabris-Rotelli
Spatial Linear Networks for modelling in criminology, epidemiology, and informal settlements

12:30 · 30 min
Assoc. Prof Michelle Carey
Penalized Regression and Differential Regularization for Spatial Statistics

Lunch

14:00 · 90 min
Project work

Coffee break

16:00 · 60 min
Project work

Friday 6 Nov

09:30 · 60 min
Dr Shruti Nath
What is the operational utility of my weather forecast, be it AI- or physics- based?

Coffee break

11:00 · 40 min
Project 1: Progress and Future Directions

11:40 · 40 min
Project 2: progress and future directions

12:20 · 40 min
Project 3: progress and future directions

Lunch