

Movement Ecology of Marine Organisms: linking observations, data analysis tools and models

**10-13 September 2018
University of Cape Town, South Africa**

We invite applications from PhD students and early career scientists (PostDocs) to participate in a workshop on *Movement Ecology of Marine Organisms: linking observations, data analysis tools and models*, to be held at the University of Cape Town from 10-13 September 2018.

The Program

This workshop will bring together experts in observing and tracking marine organisms, statisticians skilled at analyzing spatial data and modelers with experience in developing and using models to project likely responses of organisms to varying environments. The workshop will comprise a mixture of lectures and hands-on practical sessions, including introductions to (stochastic) agent-based models using [Netlogo](#) and the [Ichthyops](#) software; tutorials in data analysis for modeling animal movement; and actual field observations (field trip). Participants are expected to participate in a group exercise to develop and apply an Individual-Based-Model and to prepare a poster presenting their own work. Upon completion, participants receive a course diploma with a recommended 2 ECTS.

Learning outcomes

- Knowledge of several different kinds of data used to study movements and distribution of marine organisms.
- Ability to apply selected statistical methods to analyse spatial data of marine organisms
- Understanding of how individual-based models are used to construct and test hypotheses of movements and behaviour of marine organisms
- Enhanced skills in teamwork in analysing data and applying an IBM to address a scientific research question or hypothesis

Lecturers

- Paul Cowley (South African Institute for Aquatic Biodiversity, South Africa)
- Professor Øyvind Fiksen (University of Bergen, Norway)
- Dr Christophe Lett (IRD and UCT, France)
- Dr Christian Lindeman (University of Bergen, Norway)
- Professor Coleen Moloney (University of Cape Town, workshop organiser)
- Dr Theoni Photopoulou (St Andrews University, Scotland)
- Dr Pierre Pistorius (Nelson Mandela University, South Africa)
- Professor Steven Railsback (Humboldt State University, USA)
- Dr Josefin Titleman (University of Oslo, Norway)
- Professor Rory Wilson (University of Swansea, Wales)

Costs: The course itself is free of charge including lunch, however all other costs, i.e. accommodation and travel, will have to be paid by the participants. Financial support (travel and accommodation) to attend the workshop will be provided on a competitive basis to a limited number of participants. **To apply** to the workshop and for financial support, please complete the [online application](#) by **30 June 2018**.

This workshop is financed by the [FILAMO](#) project, funded through the INTPART program by the Norwegian Research Council & Norwegian Centre for International Cooperation in Education.

For any further questions please contact either Coleen Moloney (coleen.moloney at gmail.com) or Chris Lindemann (chris.lindemann at uib.no).