

Timetable

Sheffield Spatial Ecology Workshop: From animal movement processes to spatial distributions

Venue: Alfred Denny Conference Room, University of Sheffield

Note: In the "Discussion group" slot, we will split into groups, each of which will be led by one of the people who has spoken in the preceding "Contributed talks" slot.

Tuesday 11th July

9.00-9.15 Coffee

9.15-9.30 Welcome and housekeeping

9.30-10.30 Keynote talk: **Mark Lewis** *"Models and empirical evidence for the use of memory in animal movement pattern"*

10.30-11.00 Coffee break

11.00-12.00 Contributed talks:

Ricardo Martinez Garcia *"Absorption statistics of movement models with home-ranging behavior: animal-vehicle collisions as a case study"*

Paul Blackwell *"Stochastic differential equation models linking movement to spatial distribution"*

Garrett Street *"A Body In Motion: The Methods and Mechanisms of Movement"*

12.00-12.30 Discussion groups

12.30-14.00 Lunch

14.00-14.40 Contributed talks:

Amal Chantoufi *"Bird damage to crops in Switzerland: movement patterns of carrion crows in an agricultural landscape"*

Valentina Ruco *"Sustainability of human activities in a complex predator-prey system in the Western Alps"*

14.40-15.10 Discussion groups

15.10-16.00 Coffee break

16.00-16.40 Contributed talks:

Lukas Eigentler *"Competition dynamics in range expansion: the role of initial distributions and spatial heterogeneities"*

Jonathan Potts *"Scaling up from movement decisions to broad-scale space use patterns: an approach via step selection"*

16.40-17.10 Discussion groups

17.10 Off to the pub!

Wednesday 12th July

9.00-9.30 Coffee

9.30-10.30 Keynote talk: **Bill Fagan** *"Spatial memory and preferred travel routes in mammalian carnivores"*

10.30-11.00 Coffee break

11.00-12.00 Contributed talks:

Dominic Grainger *"Improving the efficiency of continuous-time models of individual animal movement within a Bayesian framework"*

David Scott *"Role of spatio-temporal environmental fluctuations in facilitating range expansion under climate change"*

Natasha Klappstein *"Behaviour-dependent habitat selection via state-switching step selection analysis"*

12.00-12.30 Discussion groups

12.30-13.30 Lunch

13.30-14.30 Contributed talks:

Yurij Salmaniw *"Mathematical Analysis of a Scalar Reaction-Diffusion-Advection Equation with Cognitive Map"*

Toyo Vignal *"Impact of different destocking strategies on the resilience of dry rangeland"*

Eloise Bray *"Exploring the effects of anthropogenic environmental change on seabird movement during the breeding season"*

14.30-15.00 Discussion groups

15.00-15.30 Coffee break

15.30-16.30 Contributed talks:

Lena Lyanna Payne *"Social Evolution in a Predator-Prey Model"*

Amal Safar Alnufaie *"Modelling Complex Dynamics of Social Protests on Networks"*

HaDi MaBouDi *"Behavioural and neural mechanisms of insect navigation"*

16.30-17.00 Discussion groups

17.00-18.00 General discussion: "Animal movement processes to space use patterns: where are we now?"

18.00 Off to the pub!

Thursday 13th July

9.00-9.30 Coffee

9.30-10.30 Keynote talk: **Raluca Eftimie** *"Local and global bifurcations in non-local models for ecological aggregations"*

10.30-11.10 Coffee break

11.10-11.50 Contributed talks:

Andrew Morozov *"Modelling the optimal diel vertical migration of zooplankton using novel theoretical and computations frameworks"*

Daniel Bearup *"Effects of dispersal on population dynamics in dendritic structures"*

11.50-12.20 Discussion groups

12.20-13.30 Lunch

13.30-14.30 Contributed talks:

Sébastien Coube-Sisquille *"Hierarchical Nonstationary Nearest Neighbor Gaussian Process Models"*

Rafael Menezes dos Santos *"Adding realistic movement behavior to spatial models of population growth: The population-level consequences of range-residency"*

Marianne Damholdt Bergin *"Space use requirements in rewilding sites"*

14.30-15.00 Discussion groups

15.00-15.30 Coffee break

15.30-16.10 Contributed talks:

Julia Emi de Faria Oshima *"From Pantanal to the Caatinga: applying movement ecology for conservation in Brazil"*

Érika Garcez da Rocha *"Predicting animal responses to the loss of thermal shelters by deforestation: scaling up step selection functions"*

Lucie Thompson *"Simulating the effects of dispersal barriers across food webs with metacommunity models"*

16.30-17.00 Discussion groups

17.00-18.00 General discussion: "Animal movement processes to space use patterns: where are we going next?"

18.00 Off to the pub!

Friday 14th July

9.00-9.30 Coffee

9.30-10.30 Keynote talk: **Luca Börger** title *"Disentangling individual behaviour and ecological and evolutionary processes driving animal movements under global change"*

10.30-11.00 Coffee break

11.00-12.00 Contributed talks:

Annalisa Iuorio *"The Impact Of Autotoxicity On Vegetation Dynamics: A Mathematical And Ecological Overview"*

Sara Bernardi *"What mechanisms allow leaders to steer a swarm?"*

Bradly Deeley *"The Propagation Of Invasive Plant Species In The Heterogeneous Landscape"*

12.00-12.30 Discussion groups

12.30-14.00 Lunch

14.00-15.00 Contributed talks:

Valeria Giunta *"Multi-stability in non-local advection-diffusion models"*

Edward Codling *"Movement ecology of farm and zoo animals"*

Thomas Hillen *"How the Tulips get their Stripes"*

15.00-15.30 Discussion groups

15.30-15.40 Closing remarks

15.40 Start the weekend nice and early!