

# **Mathematical Ecology: Theory and Applications (META)**

**Joint Research Group in the UK - LMS Scheme 3**



## **META WORKSHOP**

**'Analytical and computational methods for multi-scale ecology'**

**UNIVERSITY OF BIRMINGHAM (UK), 18<sup>TH</sup> DECEMBER 2015**

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# **PROGRAMME**

**10:00–11:00    Sergei Fedotov**

*[Non-Markovian random walks and anomalous transport: applications in biology and spatial ecology](#)*

**11:00–11:20    [Coffee break](#)**

**11:20–11:50    Natalia Petrovskaya**

*[Modelling patchy invasion of alien species with long-distance dispersal](#)*

**11:50–12:20    Jonathan Potts**

*[Animal movement modelling as a technique for understanding population abundance distributions](#)*

**12:20–12:50    Presentations by PhD students**

*Helena Stage [Front propagation for proliferating Levy walks](#)*

*Halil Egilmez [Tri-trophic plankton models revised: the role of space, food web structure and functional response parametrisation](#)*

**12:50–14:30    [Lunch](#)**

**14:30–15:00    Eleni Matechou**

*[Modelling individual migration patterns using a Bayesian nonparametric approach for capture-recapture data](#)*

**15:00–15:30    Axel Rossberg**

*[The theory of competition in food webs](#)*

**15:30–16:00    Presentations by PhD students**

*Manal Alqtani [The numerical integration problem in ecological monitoring](#)*

*Yadigar Sekerçi [Modelling plancton-oxygen dynamics under the climate change](#)*

**16:00–16:30    [Coffee break](#)**

**16:30–17:30    Thilo Gross**

*[Networks, spatial structure and patterns in ecology](#)*