

**Ostap Hryniv** (Durham University)

**Stochastic models of ecological populations**

**Abstract**

We discuss geometric properties of solutions to several stochastic (agent based) models of ecological populations (such as the Bolker-Pacala model, or the spatial logistic equation) and argue that the resulting populations are stable under very natural non-degeneracy conditions on the main parameters of these models. We then use the obtained bounds to describe long-term properties of the corresponding ecological populations.

Based on a joint work with Yu.Kondratiev (Bielefeld), O.Kutovyi (MIT) and S.Molchanov (UNC-Charlotte).