

abstract

MEMBERS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

The basic ingredients of Darwinian evolution, selection and mutation, are very well described by simple mathematical models. In 1973, John Maynard Smith linked game theory with evolutionary processes through the concept of evolutionarily stable strategy. Since then, cooperation has become the third fundamental pillar of evolution. I will discuss, with examples from evolutionary biology and ecology, the roles played by replicator equations (deterministic and stochastic) and cooperative dilemma games in our understanding of evolution.