

Mathematics, biology and the Newton Institute

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The Newton Institute

Since its opening in 1992, the Isaac Newton Institute has been running research programmes of up to six months' duration, which attract scientists from all over the world for intensive collaboration. The Institute has provided a fruitful environment for research, both in pure mathematics and in many areas of application, both traditional and new.

There have been some very successful programmes involving applications to biology, and it has proved possible to bring together biologists and mathematicians, and to break down some of the conceptual and semantic barriers that inhibit progress. Biological models that have been studied have been both deterministic and stochastic, but there has been rather little emphasis on statistical aspects, and indeed statistical methodology in general has been poorly represented in INI programmes.

This situation is now changing. The talk will describe some of the directions in which the Institute is now moving, and will speculate on particular characteristics of research in statistics that may (or may not) prove relevant to the success of future programmes.