

Symposium in honor of Kyoshi Itô

Stochastic Analysis and its Impact in Mathematics and Science

July 10-11, 2008

Stochastic Analysis in Genetics and Population Modelling

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Abstract

Stochastic analysis which has developed over the past 65 years based on the foundations laid by Kiyosi Itô has had a profound impact in mathematics and science. In this lecture we give some indications of the impact it has had in population biology and also some of the rich mathematical developments in stochastic analysis inspired by the ideas of Itô that have resulted from the challenges of modelling biological populations.