

THE CRM APPLIED MATHEMATICAL AND PHYSICS (CAMP) SEMINARS



CENTRE DE RECERCA MATEMÀTICA

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Population models and the effects of hysteresis

Abstract:

Hysteretic switching between different modes of behaviour in response to external stimuli can be observed in different organisms ranging from bacteria to complex social species including human beings.

We employ the concepts of the non-ideal relay and Preisach operators to construct ordinary operator-differential equations that allow us to study the effect of hysteresis on the dynamics of population models such as SIR and predator-prey systems.

Date: July 24, 2014

Place: Room C1/028

Time: 12:00

