



PIMS Mathematical Biology Seminar



**Monday, April 7, 2008
3 pm – 657 CAB**

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Identifiability and Control of Biological Systems

Model Predictive Control (MPC) is commonly used for the regulation of chemical engineering systems.

The MPC formulation can also be applied to biological systems that are described by a set of differential equations. Such a model of the Hypothalamus-Pituitary-Adrenal axis will be presented. MPC will be used to drive the system from a diseased to a healthy steady-state point. Furthermore, the results obtained using MPC can be used to develop a more simple and robust control scheme. The sensitivity of the proposed control algorithm to changes in parameter values will be examined.

Join us for refreshments in CAB 549 immediately following the seminar

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