

Janos Turi

Parameter Identification in a Respiratory Control System Model

Abstract

In this talk we study parameter identification issues by computational means for a set of nonlinear delay equations which have been proposed to model the dynamics of a simplified version of the respiratory control system. We design specific inputs for our system to produce "information rich" output data, needed to determine values of unknown parameters. We also consider the effects of noisy measurements in the identification process. Several case studies are included .