Inverse Problem called the Department of Applied Physics

Tero, Karjalainen

(a): Centre for Continuous Learning, University of Eastern Finland, Joensuu and Kuopio, Finland

Abstract

In Eastern Finland we have this special inverse problem called the Department of Applied Physics. This special problem belongs to the application area of system identification. This time e volving system is a non-linear with some stochastic characteristics. There are some discrepancies in identifying model parameters and observations. Crude arbitrariness will be used in defining initial values. The set of observations at different time steps will be presented and some boundary conditions are highlighted.

The presentation will go through some major events in the history of problem definition and e volution. To the best of our knowledge this is the first attempt to also formulate a model for this ill-posed problem.