School of Electrical Engineering

KTH / **Electrical Engineering**

Seminar on Sequential Techniques by George Moustakides

» 2007-10-08

Sequential techniques for hypothesis testing and change detection - seminar by Professor George M. Moustakides. kl. 13:15, Thursday 11th Oktober at Seminar room, plan 8

We are going to make an overview of the techniques developed over the last 60 years for solving two of the most important problems in sequential analysis, namely sequential hypothesis testing and sequential detection of changes. We are going to focus on the Sequential Probability Ratio Test (SPRT) which solves the first problem and the Cumulative Sum (CUSUM) test used for the second. Specifically we are going to discuss existing optimality results for the two tests, mathematical formulas for estimating the corresponding performance and finally several interesting questions that still remain open. In the last part of our talk we are going to introduce the results developed for distributed hypothesis testing and change detection. Both distributed versions have recently attracted significant attention because they find application in sensor and ad-hoc networks.

Back