S-88.200: Statistical Signal Processing

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Outline of the course

- The lecture notes cover the following topics:

  1. Basic Concepts of Estimation

  2. Estimation of Deterministic Parameters
     - (a) Estimation techniques
     - (b) Robust Estimation
     - (c) Practical estimators with no optimality consideration

  3. Estimation of Random Parameters

  4. Optimum filtering
     - (a) Wiener filter
     - (b) Adaptive LMS-filter
     - (c) Kalman filter
     - (d) Extended Kalman filter

  5. Array Signal Processing: DoA Estimation (renewed from last year)

  6. Basics in Detection