

SCHOOL OF ELECTRICAL ENGINEERING

Signal Theory: EQ1220 / EQ1210

Reading Assignment: Ergodicity (2/9) 2012-09-03,

**Notice:**

To be collected before Lecture 3.

The essay consists of three questions. If you successfully answer all questions, you obtain 1 bonus point for part A of the final exam. An essay with partially correct answers will give you 1/2 point.

For the answers you should not copy text from a textbook. Group work is also not allowed, but feel free to discuss with your fellows. The reports will be checked against plagiarism.

Be brief, i.e., at most 1 page.

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Explain (in your own words) ...

1. ...how you intuitively understand the concept of *ergodicity*.
  2. ...why ergodicity is important for the study of stationary stochastic processes (e.g., for estimation). What is the "problem" with non-ergodic processes?
  3. ...how you interpret partial ergodicity with respect to the acf.
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