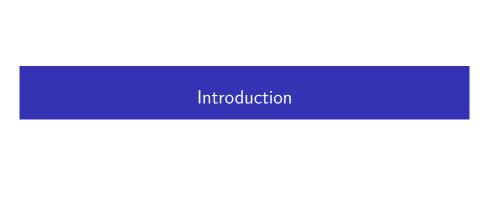
Decision and Estimation in Data Processing



Organization

- 4 credits
- Professors
 - ▶ Lectures: Nicolae Cleju
 - Laboratories / Seminar: Nicolae Cleju
- Time schedule
 - ▶ 14 weeks of lectures (3h each)
 - ▶ 7 laboratories (2h each)
 - ▶ 7 seminars (2h each)
- ▶ My office hours: To Be Announced (best by appointment)

Evaluation

- Exam
 - ▶ 60% of final grade
 - theory and exercises
 - Many small questions (like in Information Theory exam), both for theory and exercises
- Laboratory
 - ▶ 20% of final grade
 - ▶ in Matlab / Simulink
 - grade will be computed from:
 - activity throughout semester (10%)
 - ▶ final laboratory practical test in Matlab / Simulink (10%)
- Intermediate tests
 - ▶ 20% of final grade
 - 3 tests: in Week 5, Week 8 and Week 11
 - test = one exercise, 30 minutes, during lecture or laboratory (will be decided)
 - ► Tests grade = average of the three tests grades
- Final grade = 60% Exam + 20% Lab + 20% Tests

Course structure

- 1. Chapter I: Random signals
- 2. Chapter II: Elements of statistical decision theory
- 3. Chapter III: Statistical estimation

Bibliography (TBD)

- 1. *Elements of Information Theory*, Valeriu Munteanu, Daniela Tarniceriu, Ed. CERMI 2007
- 2. *Elements of Information Theory*, Thomas M. Cover, Joy A. Thomas, 2nd Edition, Wiley 2006
- 3. Transmisia si codarea informatiei, lectures at ETTI (Romanian)
- 4. *Information and Coding Theory*, Gareth A. Jones, J. Mary Jones, Springer 2000