Math 281B : Mathematical Statistics

Instruction team

- Instructor : Ery Arias-Castro (APM 5141) `<eariasca@ucsd.edu>`
- Teaching Assistant : Linbo Liu (APM 5412) `<linbo@ucsd.edu>`

Office hours will be announced by email or posted online.

Textbook, topics, and structure   We will follow the textbook *Theory of Point Estimation* (1998, 2nd edition) by E.L. Lehmann and G. Casella.[1]   The book is optional. It will be put on reserves at the library. We will attempt to cover the essentials of finite-sample (i.e., non-asymptotic) optimality theory for estimators, which in the textbook corresponds to Chapter 2 (unbiased estimators), Chapter 3 (equivariant estimators), Chapter 4 (average risk optimality), and Chapter 5 (maximum risk optimality).

Assignments and grading   Some homework problems will be suggested, but not graded. Additional reading may also be suggested. The textbook will provide more than enough reading material for the quarter and is highly recommended to students wanting to go deeper into the material.

The grade will be based on two in-class exams (in place and time of lecture):

- 5th week (TBD)
- 10th week (TBD)

There will not be make-up exams.

Academic Integrity   It is assumed that the students are current on UCSD's policy on academic integrity (academicintegrity.ucsd.edu).

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[1]   http://roger.ucsd.edu/record=b3736952