# Revision class

Relevant topics: Chapter 1-7

- Law of large numbers, CLT, convergence in probability/distribution, $\delta$-method

- statistics, estimator, consistency

- MoM: computation/consistency

- MLE: computation, invariance

- MAD/MSE/Bias, Bias-Variance decomposition (Thm 4.1) inadmissibility, MVUE

- Sufficient stats: factorization criterion (Thm 4.6), Rao-Blackwell theorem (Thm. 4.7)

- Distributions: • Gamma, $x^2$, t given on Cheat sheet together with important properties (No need to learn by heart)
  - • I expect you to know uniform, Ber, Bin, Normal + properties by heart

- Confidence intervals: pivots & computation given steps in the lecture notes, asymptotic CI

- CR inequality: determine MVUE by computing Fisher information + "guessing" MVUE, approximate distribution of MLE for $n \longrightarrow \infty$