

1. Consistency of MLE, Covariance Matrices, Multivariate Statistics

Objectives

At the end of this lecture, you will be able to do the following:

- Derive the **maximum likelihood estimate** for the uniform statistical model and prove its consistency.
- Recognize that the **maximum likelihood estimator** is consistent.
- Know that **independence** implies zero **covariance** but not vice-versa.
- Define **sample covariance** as an unbiased estimator for the covariance.
- Obtain the **covariance matrix** of a random vector.
- Identify **multivariate Gaussian random variables** and understand affine transformations of multivariate Gaussian random variables.
- Use **multivariate central limit theorem** .
- Use **multivariate delta method** .

讨论

显示讨论

主题: Unit 3 Methods of Estimation:Lecture 10: Consistency of MLE, Covariance Matrices, and Multivariate Statistics / 1. Consistency of MLE, Covariance Matrices, Multivariate Statistics