

GRADUATE SEMINAR

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Investigate and prove the properties of the estimator suggested by Khan(1968)

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1:30 PM

Math Lounge (CW307.20)

Abstract: The normal distribution plays a central role in a large body of statistics. Mostly, the situation when the variance is known is only of theoretical interest. There are many practical situations when the coefficient of variation is known. To find the best possible estimator of the parameter μ in the normal distribution $N(\mu, b^2\mu^2)$ ($\mu > 0$) where μ is a known positive constant, Khan suggested that a proper linear combination of the sample mean and the sample deviation is better to adopt in 1968. Here we investigate and prove the theoretical properties of the best unbiased estimator for the mean with a known coefficient of variation suggested by Khan.