Statistics

Research (StaR) Colloquium

Seminar

Presenter	**Mr. Esam AlSawi** Dept of Mathematics & Statistics, KFUPM
Title	Modified Inference about the Location Parameter of the Logistic Distribution Using Type II Censored Samples
Topic & (Level)	Statistical Inference & Simulations (**Estimation, Monte Carlo Methods**)
Audience	All KFUPM community are cordially Invited
Date	Tuesday, May 29, 2007
Time	1:00 PM
Location	Building 5, Smart Classroom # 203

Abstract

The Maximum Likelihood Estimator (MLE) and the Likelihood Ratio Test (LRT) can't be found in closed form in general. The technique suggested by K. G. Mehrotra and P. Nanda (1974) is used to modify the MLE to get an estimator of the location parameter of the logistic distribution in case of type II censored sample in closed form. Then this estimator will be used to construct a new test in closed form, which is a modification of the LRT, for testing a simple hypothesis against one sided alternatives. The MLE and the new estimator are compared through their bias and mean square error functions and the LRT and the new test are compared through their power functions by simulation. The simulation results show that the new estimator and the new test are good competitors of the MLE and the LRT respectively.

Tea and Coffee will be served