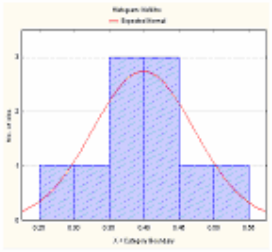
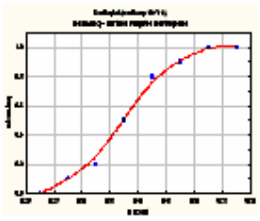


Statistics

Research (StaR) Colloquium



Seminar

Dept of Mathematics and Statistics

King Fahd University of Petroleum and Minerals

Presenter	**Dr. Hassen A. Muttlak** **Mathematics and Statistics Dept** **KFUPM**
Title	**Confidence interval estimation of the location and scale parameters of the logistic distribution using pivotal method**
Topic & (Level)	Statistical Estimation **(Statistical inference, Sampling, Simulation)**
Audience	All KFUPM community are cordially Invited
Date	Sunday, Apr 6, 2008
Time	1:00 PM – 1:50 PM
Location	Building 5, Smart Classroom # 203

Abstract

Different confidence intervals (CI) will be constructed for the location and scale parameters of the logistic distribution by assuming that one of them is known. The maximum likelihood estimator (MLE) and several different pivots will be used to construct different CI for the logistic parameters, using simple random sampling (SRS) and ranked set sampling (RSS). They will be compared via their expected lengths and the standard errors of their lengths using computer simulation. The confidence intervals base on the RSS are found to be more efficient i.e. having shorter expected lengths and smaller standard errors from there competitors based on the SRS.

Tea and Coffee will be served