## **Probability and Statistics Seminar**

## Short Introduction to Quantization (20 minutes) Mrinal Kanti Roychowdhury, PhD

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*Abstract:* In the first 20 minutes of the seminar I am going to give a brief introduction to the problem of quantization and define the principal points of probability distributions.

## High Precision Numerical Computation of Principal Points for Univariate Distributions (30 minutes)

## Josef Sifuentes, PhD

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*Abstract:* Principal points were first introduced by Flury: for a positive integer n, n principal points of a random variable are the n points that minimize the mean squared distance between the random variable and the nearest of the n points. In this talk, we demonstrate a high precision numerical method for computing the n principal points and the corresponding values of mean squared distance for different values of n for some univariate absolutely continuous distributions.

Date: Friday March 23, 2018 Time: 10:00 to 11:00 AM Location: EMAGC 2.210 and BMAIN 1.220

Please direct any questions or requests to Dr. Tamer Oraby at tamer.oraby@utrgv.edu