## **Probability and Statistics Seminar**

Borel-Tanner Distribution and Bayes Estimators for the Basic Reproduction Number of an Epidemic

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**Abstract:** We construct a monotone (improved) version of an empirical Bayes estimator for the parameter of Borel-Tanner (BT) distribution. The BT distribution arises, for example, in branching stochastic processes and queueing theory. Our interest stems from its role as the distribution of the total number of infected individuals in an epidemic modeled by a branching process.

**Date: Friday October 19, 2018** 

<u>Time</u>: 10:00 to 11:00 AM

Location: EMAGC 1.414 and BMAIN 1.220

**ZOOM LINK**: <u>https://utrgv.zoom.us/j/388361732</u>

Please direct any questions or requests to Dr. Demba Fofana at <u>demba.fofana@utrgv.edu</u> or to Dr. Kristina Vatcheva at <u>kristina.vatcheva@utrgv.edu</u>