

# Lecture #23: Classical Probability Distributions

## Lecture Presentation

### **The Poisson Distribution**

**What Does This Model?**

**What Assumptions are This Based on?**



**What Form Does This Take?**

**What are Some Other Related Probability Distributions?**

## **More About Continuous Probability Theory**

**What Discrete Sample Spaces and Probability Distributions Do These Resemble?**



**How are Expected Values of “Related” Random Variable *Really* Defined?**



**In Particular, How is the *Variance* Defined?**

**What are Some Significant Results That Replace Important Results for Discrete Probability Theory**

**What is the “Central Limit Theorem”?**