

# **Undergraduate Math Club**

**Fall 2006**

**2<sup>nd</sup> floor Nesbitt Common Room**

**Thursday, November 2, 4:10-5:00pm**

**(free pizza and pop, as always)**

## **To Bayes or not to Bayes**

**Professor Bhramar Mukherjee**

**(Department of Biostatistics)**

### **Abstract**

Thomas Bayes (1702-1761), an English theologian and mathematician, put forward his theory of probability in an "Essay towards solving a problem in the doctrine of chances" published in the Philosophical Transactions of the Royal Society of London in 1764. Since then, Bayes' techniques have remained a subject of discussion, debate and have generated much controversy. In this talk, I will present an introduction to the Bayesian paradigm as it has evolved in Statistics since the introduction of "Bayes' Theorem". There will be plenty of examples, pictures and a case-study in bio-medical research to illustrate the application of Bayesian methods in the context of real problems.