

# **STATISTICS COLLOQUIUM**

**Friday, May 8, 2009**

**Time: 1 PM**

**Location: McCarthy Hall, Room 480**

## **“Some Problems in Statistical Seismology”**

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### **ABSTRACT**

Earthquakes represent one of the most complicated and complex systems in nature. They are a scale-invariant phenomenon covering more than eleven orders of magnitude (in terms of energy release). Seismicity also produces a rich pattern of interactions over a wide range of space and time scales. This seminar will explore some of the most fundamental aspects of statistical seismology, with an emphasis on temporal variations in seismicity that may be applied to earthquake forecasting. Some of the most important statistical issues to be discussed include spatial-temporal clustering, the statistics of non-point processes, model validation, and error diagrams. Statistical seismology is a young field of study with many opportunities for collaboration; the goal of this seminar is to begin a dialog on this fruitful line of research.