

SANTA BARBARA • SANTA CRUZ

## Geometry, Topology, and Physics Seminar

## A Mathematical Introduction to F-theory

## David Morrison UCSB

Friday, April 30th, 2010, 4:00 p.m. Room 6635 South Hall

**Abstract:** "F-theory" is a construction in string theory based on elliptic fibrations in algebraic geometry. The study of F-theory over the past 14 years has raised various new questions in algebraic geometry, not all of which have been completely resolved. A recent resurgence of interest in F-theory among string theorists has renewed the interest in some of these questions.

In this week's lecture, I will introduce this topic in terms intended for both mathematicians and physicists. In subsequent weeks, we will learn about various more specialized questions in mathematical F-theory.