



## Applied and Computational Mathematics Seminar

**Title:** Constraining String Inflation Models With Observations

**Speaker:** Ian Huston (Queen Mary, University of London)

**Date:** Thu 20th November 2008 at 2:15PM

**Location:** Mathematical Sciences Seminar Room

**Abstract:** With observational data on the early universe rapidly increasing, theorists have turned to new ways of describing and classifying their models. One new direction with great promise is the search for non-gaussianity in the Cosmic Microwave Background fluctuations. Any detection of this non-gaussianity could rule out many of the simplest inflationary models.

At the same time string theory inspired models are becoming increasingly popular with the renewed effort to link string theory with observations. One of the most straightforward applications of string theory to cosmology is Dirac-Born-Infeld inflation, where extended objects called branes move in a warped region known as a throat.

I will describe my recent work on constraining these models with observations and some ways to get around the (quite strong) constraints.

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