



PHYSICS AND ASTRONOMY SEMINAR

Dr. Robert Brandenberger

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“Searching for Cosmic Strings in New Observational Windows”

Abstract

Cosmic strings are topologically stable solutions of the field equations in a large class of particle physics models beyond the "Standard Model". If Nature is described by such a model, then a network of cosmic strings inevitably forms in the early universe and survives to the present time. The gravitational effects of these strings lead to unique signatures in cosmological windows such as CMB temperature and polarization maps and 21cm redshift surveys. Loops of string may also play an important role in the formation of globular clusters and super-massive black holes. I will give an overview of these connections between particle physics and cosmology.

Thursday, November 26, 2015

2:30 p.m.

Clearihue Building

Room A212