

PHYSICS DEPARTMENT COLLOQUIUM

"COSMOLOGY ON THE STRING THEORY LANDSCAPE"

BY

DR. Shamit Kachru
Stanford University

String theory is our leading candidate for a unified theory of particle physics and gravity. However, it is becoming increasingly clear that it accommodates an astonishingly diverse range of possible 4d worlds, all arising at different points in a "landscape" of possible vacuum states. We explain how this landscape seems to contain valleys with positive cosmological constant (which could be related to the observed cosmic acceleration), and how string theory also suggests simple and distinctively stringy models of early universe inflation.

THURSDAY, JANUARY 15, 2004
4:00 PM IN 102 JFB
REFRESHMENTS AT 3:30 PM IN 219 JFB