

The Humboldt State University
Department of Mathematics
Presents:

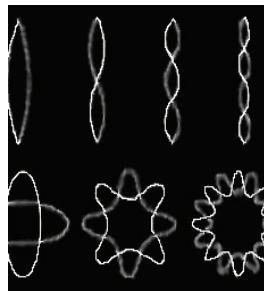
The 60th Harry S. Kieval Lecture **

Thursday, November 1, 2012
7:30 P.M.

Founder's Hall Room 118

Robert Bryant, Ph.D.

Director of the Mathematical Sciences
Research Institute (MSRI)



**"Geometry Old and New:
From Euclid to String Theory"**

Classical geometry is based on notions of symmetry and congruence, and these ideas, while very old, have deeply influenced our understanding of the physical world. The idea of modeling the world through principles of least action or least energy are tied to symmetry in deep ways. In this talk, I will survey the history of how this relationship was uncovered by mathematicians such as Euler, Gauss, Lie, and Noether and is still developing in our modern understanding of the world, from Einstein's theory of relativity even to contemporary versions of string theory.

**A lecture on some popular and/or broad aspects of mathematics attractive to undergraduates and the public

For more information go to: <http://www.humboldt.edu/math/kieval/index.html>

HSU is an AA/EO institution.

Disability accommodations may be available from event sponsor at 826-3143