THE GEOMETRY AND TOPOLOGY OF SPACE

Talk/Presentation by

JEFF WEEKS

(Canton, NY)
Author of "The Shape of Space"



Location: Hitchcock Hall 131

(The Ohio State University)

Date: Sat., August 9th, 2003

Time: 9:30 am

Everyone is cordially invited!

Abstract:

Recent satellite data are beginning to reveal the curvature and topology of the universe.

The first half of this presentation will introduce curved space, using physical models and interactive 3D graphics to build intuition and demonstrate some surprising visual effects. We'll see how measurements of the cosmic microwave

background radiation are determining the curvature

The second half of the presentation will use computer games to introduce the concept of a finite, multiconnected universe, and we will see how the same satellite data suggest that the real universe may be multiconnected. For undergraduates in

of the universe to unprecedented precision.

mathematics, physics and astronomy. (graduate students and faculty also welcome).

Sponsored by the NSF/VIGRE Program of the Department of Mathematics at OSU.