



Thursday, March 26, 2009  
3:00–3:50 p.m.  
Harrelson 330

# The shape of space

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To our eyes, space looks flat. But Einstein tells us that space is curved. Well, if space is curved, then **what is the overall shape of space?** Does it curve back on itself or not? If it curves back on itself, is its overall shape a sphere, or something more exotic? Physicists are doing experiments to try to determine the overall shape of space, by studying patterns in the microwave background radiation. Meanwhile, mathematicians are trying to understand the possible shapes that space could take, to narrow down the possibilities.

This talk won't tackle any physics. Instead, we'll look at a simple mathematical question: what global shape can a two-dimensional "space" have? The talk will be **accessible to all undergraduates**, and will serve as a gentle introduction to the mathematical subject of **topology**.

NCSU Society for Undergraduate Mathematics

## SUM Series