

TEMPLE UNIVERSITY MATH CLUB

Circles (and spheres)

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ABSTRACT: In this talk, I will discuss circles in various mathematical contexts. I will start in familiar territory and give an interesting derivation of the area and circumference of an ordinary Euclidean circle using methods that lead back to Archimedes and da Vinci. We'll then move to less familiar contexts and discuss the notion of a circle (or sphere) in various spaces. I'll discuss the "size" of these various circles and how the "size" grows as a function of the radius. Through this discussion, we'll see an application to finding the shortest route between two cities and will lead naturally to the notion of the hyperbolic plane. Everyone is welcome and the talk should be (mostly) understandable to anyone who has taken high school geometry.

FRIDAY, FEBRUARY 10, 2012
TALK: 1:00 – 1:50PM
ROOM 617, WACHMAN HALL
DEPARTMENT OF MATHEMATICS
PIZZA AFTER THE TALK!