Lines are Circles and Other Weird Phenomena

An Introduction to Hyperbolic Geometry

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We take for granted the fundamental facts of geometry: the interior angles of a triangle add up to 180 degrees, the shortest distance is a straight line, and Euclid's famous parallel postulate is true. None of this is true in hyperbolic geometry! In this talk, I'll introduce the Poincare upper half plane model for hyperbolic space. I'll talk about some weird facts about hyperbolic geometry and introduce the rigid motions, or isometries, of hyperbolic space.

Date: Tuesday February 25, 2020
Time: 7:00 pm
Place: Park 328