Temple University Geometry Seminar

Ilya Kofman

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will speak on

A new twist on Lorenz links

ABSTRACT: Lorenz knots are periodic orbits in the flow on $\mathbb{R}^3$ given by the Lorenz differential equations. We show that Lorenz links coincide with a natural generalization of twisted torus links, given by repeated positive twisting. Using this correspondence, we identify many of the simplest hyperbolic knots as Lorenz knots. We also show that both hyperbolic volume and the Mahler measure of Jones polynomials are bounded for infinite collections of hyperbolic Lorenz links. This is joint work with Joan Birman.

Tuesday, 4 November 2008
Lecture at 1:10 pm
Coffee, tea, and refreshments from 3-5 pm
Room 617, Wachman Building
Department of Mathematics