

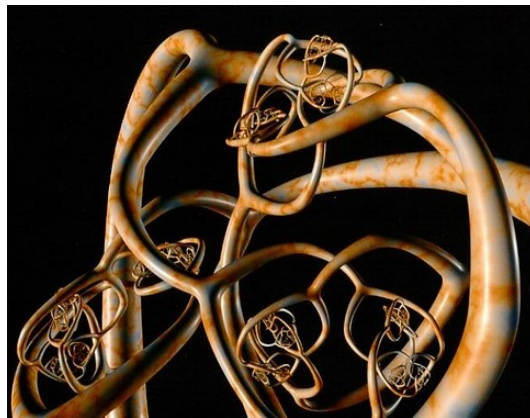
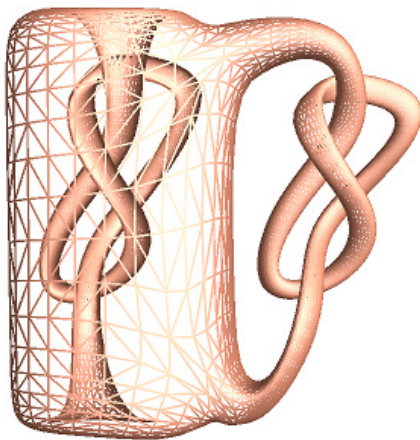
The SUMO Speaker Series for Undergraduates

Tuesday, April 11th

5:30 – 6:20PM, Ricker Dining Green Room (238 Santa Teresa St.)

Please feel free to bring in dinner from Ricker Dining before the talk.

Geometrization and Very Special Metrics



Rafe Mazzeo

Abstract

A foundational set of results from over one hundred years ago states that in a certain precise sense we can “list” every two-dimensional surface and we can recognize them in terms of the special (constant curvature) geometric structures they possess. One of the most profound recent results in geometry and topology is that in a certain (weaker) sense, there is a similar result for three-dimensional surfaces (usually called manifolds). I will give an account of this development to give you some idea of the main ideas of these results, why they matter, and why similar results are impossible for higher dimensional manifolds.

<http://sumo.stanford.edu/speakers.html>