Temple University Mathematics Colloquium

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Université Toulouse III

will speak on

Three-dimensional geometry as a tool for Teichmüller theory

ABSTRACT: The space of complex structures on a closed surface S, called the Teichmüller space of S, has a rich geometric structure where various branches of mathematics meet. Three-dimensional hyperbolic manifolds are intimately related to Teichmüller theory and provide useful tools to understand it, like the renormalized volume of quasifuchsian manifolds. Recently new tools originating in physics, like globally hyperbolic anti-de Sitter manifolds, particles and multi-black holes, have also proved useful in obtaining new results in Teichmüller theory.

Friday, February 24, 2012
Lecture at 12:00 pm
Coffee, tea, and refreshments from 11:45 am
Room 617, Wachman Building
Department of Mathematics