

TEMPLE UNIVERSITY GEOMETRY SEMINAR

Roland van der Veen

University of Amsterdam

will speak on

The Jones polynomial of embedded graphs: Geometry and combinatorics

ABSTRACT: The Jones polynomial is one of the most effective and yet least understood tools in knot theory. In this talk we aim to extend the Jones polynomial to graphs embedded in space so as to study the interplay between the combinatorics of the graph and the geometry of its embedding. More specifically we will relate the Jones polynomial to the hyperbolic structure on the complement of the graph. On the other hand we will also show that the Jones polynomial determines the abstract isomorphism type of the graph.

I will not assume familiarity with either the Jones polynomial or hyperbolic geometry, so I will briefly introduce them first.

TUESDAY, 11 NOVEMBER 2008

LECTURE AT 1:10 PM

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING
DEPARTMENT OF MATHEMATICS