

Department of Mathematical Sciences
The Johns Hopkins University

SEMINAR

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Friday, April 4, 2003
304 Whitehead Hall
Refreshments: **10:30 a.m.**
Seminar: **11:00 a.m.**

RANDOM TRIANGULATIONS

ABSTRACT

Triangulations of the plane with n vertices fall into finitely many isomorphism classes. The number of such classes has been determined by Tutte. Let n be large and let T_n be chosen uniformly at random among such isomorphism classes. The geometry of T_n turns out to be very different from the geometry one gets by random constructions, such as Voronoi triangulations, based on the Euclidean geometry. In a way, T_n is a “generic” metric of the sphere. Physicists have been interested in these triangulations (under the name “quantum gravity”). The purpose of the talk will be to survey some recent progress (by several different authors) in the understanding the geometry of these uniform triangulations.