Geometry Seminar
October 3, 2006, Tuesday, 6:00 p.m.
Room 613, Courant Institute
251 Mercer Street, New York

Arrangements of topological hyperplanes

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Abstract

Topological hyperplanes are like hyperplanes in R^n, except that they need not be straight. The properties they do have are that they separate the whole space into two parts and the intersection of any two of them, if not empty, is a topological hyperplane in each. An *arrangement* of topological hyperplanes is a finite set; a *region* of the arrangement is a component of the complement. We ask about the number and topology of the regions and how arrangements of topological hyperplanes differ from those of true hyperplanes. This is joint work with David Forge.

For further information contact {pach,pollack}@cims.nyu.edu, or visit our website: http://www.math.nyu.edu/seminars/geometry_seminar.html