

Geometry Seminar
September 25, 2007, Tuesday, 6:00 p.m.
Room 613, Courant Institute
251 Mercer Street, New York

Tropical oriented matroids

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Abstract

Tropical oriented matroids are a combinatorial abstraction of hyperplane arrangements over the tropical semiring $(R, \max, +)$. These objects are the n -sign analogues to ordinary 2-sign oriented matroids; in this work, we axiomatize these objects, develop the parallelism and delve into the properties of these objects, hinting at a topological representation theorem analogous to the one for ordinary oriented matroids.

This is joint work with Federico Ardila (San Francisco State).

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