Seminar on Combinatorial Computing
September 20, Wednesday, 6:30 p.m.
Room 6417, Graduate Center
365 Fifth Avenue, New York

Drawing graphs with few slopes

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Abstract

We show that every graph G with maximum degree three has a straight-line drawing in the plane using edges of at most five different slopes. Moreover, if G is connected and has at least one vertex of degree less than three, then four directions suffice. No such result holds for graphs of maximum degree five.

Joint work with B. Keszegh, J, Pach, and D. Pálvölgyi.

For further information contact János Pach at pach@cims.nyu.edu, or visit our website
http://www.math.nyu.edu/p̃ach/public_html/combinatorics_seminar.html