Seminar on Combinatorial Computing
February 14, 2007, Wednesday, 6:30 p.m.
Room 6417, Graduate Center
365 Fifth Avenue, New York

# New proof of the theorem of Csima and Sawyer concerning ordinary points

Jonathan Lenchner
IBM T.J. Watson Research Center

**Abstract**

I provide a new and elementary proof of the 1993 result of Csima and Sawyer that aside from a single arrangement of 7 lines with 3 ordinary points, any projective arrangement of n lines (or pseudolines) must contain at least 6n/13 ordinary points. An ordinary point is a point of intersection of precisely 2 lines (psuedolines).

This is joint work with Hervé Brönnimann.

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