Meeting: 1002, Pittsburgh, Pennsylvania, SS 2A, Special Session on Convexity and Combinatorics

1002-52-77 **Adrian Dumitrescu*** (ad@cs.uwm.edu), Computer Science, University of Wisconsin–Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211. *On distinct distances from a vertex of a convex polygon.*

Given a set P of n points in convex position in the plane, we prove that there exists a point $p \in P$ such that the number of distinct distances from p is at least $\lceil (13n-6)/36 \rceil$. The best previous bound, $\lceil n/3 \rceil$, from 1952, is due to Leo Moser. (Received August 31, 2004)