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

1002-52-51 **David G. Larman*** (d.larman@ucl.ac.uk), Department of Mathematics, University College London, Gower Street, WC1E 6BT London, England, and **Grzegorz Sojka**. *Determining a convex body by minor subsets of the boundary.* Preliminary report.

For a fixed point x in the interior of an n-dimensional convex body K consider the set K(x) of all those points y on the boundary of K which is closer to x than is the other boundary point lying on the line through x and y. Suprisingly, K(x) can be most of bdy(K) but bdyK cannot be covered by fewer than n+1 sets of the form cl.K(x). (Received July 28, 2004)