John Shareshian and Michelle L Wachs\* (wachs@math.miami.edu), Department of Mathematics, University of Miami, Coral Gables, FL 33124. Rees products of posets and lexicographical shellability. Preliminary report.

The notion of Rees product of posets was introduced by Björner and Welker in their study of connections between poset topology and commutative algebra, and was further studied by Shareshian and Wachs in connection with permutation enumeration. In this paper we apply lexicographical shellability to some specific examples of Rees products in order to further develop the link with permutation enumeration. (Received February 10, 2009)