1089-05-35 **Mike Develin**, **Matthew Macauley** and **Victor Reiner*** (reiner@math.umn.edu), School of Mathematics, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455. *Toric partial orders.*

We define toric partial orders, corresponding to regions of graphic toric hyperplane arrangements, just as ordinary partial orders correspond to regions of graphic hyperplane arrangements. Combinatorially, toric posets correspond to finite posets under the equivalence relation generated by converting minimal elements into maximal elements, or sources into sinks.

We derive toric analogues for several features of ordinary partial orders, such as chains, antichains, transitivity, Hasse diagrams, linear extensions, and total orders. (Received January 15, 2013)