1024-05-100 **Jenő Lehel*** (jlehel@memphis.edu), Department of Mathematical Sciences, The University of Memphis, Dunn Hall, Memphis, TN 38152, and **Frédéric Maffray** and **Myriam Preissmann**.
Maximum directed cuts in digraphs with degree restriction.

Every digraph of size m has a directed cut of size at least $m/4 + \Theta(m^{1/2})$. This bound eventually improves when a restricted subfamily of digraphs is taken into consideration. For instance, if the maximum outdegree of the digraph is k, then it has a cut of size at least $m/4 + m/(8k + 4)$. Here we investigate the size of the maximum directed cut for the larger family of digraphs in which each vertex has either indegree at most k or outdegree at most k. (Received January 03, 2007)