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Glencora Borradaile, Jennifer Iglesias, Theresa Migler, Antonio Ochoa*
(aochoa@csupomona.edu), **Gordon Wilfong** and **Lisa Zhang**. *Egalitarian Graph Orientations*.

Given an undirected graph, one can assign directions to each of the edges of the graph, thus *orienting* the graph. We consider the problems of orienting a graph so that the resulting orientation achieves an egalitarian distribution of indegrees among its vertices and finding a strongly-connected orientation that minimizes the maximum indegree. Specifically, we present polynomial-time algorithms for: finding an orientation that minimizes the lexicographic order of the indegrees and finding a strongly-connected orientation that minimizes the maximum indegree. (Received September 23, 2011)