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Lon H Mitchell*, Department of Mathematics, Virginia Commonwealth University, 1001 West Main Street, Richmond, VA 23284. *Chordal Supergraphs and Minimum Semidefinite Rank.*

For an undirected simple graph G , the minimum rank among all positive semidefinite matrices with graph G is called the minimum semidefinite rank (msr) of G . We show that the msr of a graph G is bounded below by the msr of certain chordal graphs containing G as a subgraph. This improves upon a previous lower bound for msr given by OS sets. (Received July 22, 2008)