

## Minimum Rank and Zero Forcing Parameters for Cobipartite Graphs

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The minimum rank problem for a graph is the problem of determining the minimum rank over the set of symmetric matrices described by the graph. The minimum rank of a graph has been studied by using zero-nonzero patterns. In 2009, it was shown that one can convert the minimum rank problem for cobipartite graphs to the minimum rank problem for a zero-nonzero pattern constructed from the cobipartite graph. In this talk, a connection between when the triangle number of a zero-nonzero pattern is the same as the minimum rank of the zero-nonzero pattern and when the maximum nullity and zero forcing number are the same for a cobipartite graph is discussed. We also mention the relationships between a variety of different zero forcing parameters for cobipartite graphs.

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