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**Derek D Young\*** (dyoung@mtholyoke.edu). *The Maximum Nullity and Zero Forcing Number of a Graph.*

The maximum nullity of a simple graph is the largest possible nullity over all symmetric matrices which can be described by the graph. The zero forcing number of a simple graph is the minimum number of blue vertices needed to force all vertices of the graph blue by applying the color change rule. In 2008, it was shown that the maximum nullity of a graph could be bounded above by the zero forcing number of the graph. During this time, the problem of characterizing graphs whose maximum nullity is the same as the zero forcing number was also posed. In this talk, we will discuss some techniques which can be used to determine if the maximum nullity is the same as the zero forcing number for some families of graphs. (Received September 15, 2020)