

1135-05-3193 **Jessica De Silva*** (jessica.desilva@huskers.unl.edu), 1617 F St., Apt. 27, Lincoln, NE
68508. *Laplacian Polynomials of Threshold Graphs*. Preliminary report.

Graphs with extremal properties are often found in the class of threshold graphs. Threshold graphs can be obtained from any graph by repeated application of the Kelmans transformation. This transformation has been shown to decrease the number of spanning trees and increase the number of cliques in a graph. In this talk, we show that the Kelmans transformation also decreases (in absolute value) the coefficients of the Laplacian polynomial. This result implies that the coefficients of the Laplacian polynomial of threshold graphs are minimal. (Received September 27, 2017)