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Joshua J Steier* (joshua.steier@student.shu.edu), joshua.steier@student.shu.edu. *On the Degree Sequences of Multigraphs with Edge Additions and Deletions*. Preliminary report.

The degree sequence of a graph is a numerical method to characterize properties of graphs. Generalized forms of degree sequences exist for complete graphs and complete graphs. Nikolopolus et al., characterized the number of spanning trees from edge deletions and edge additions. Instead of investigating the number of spanning trees of graphs that arise from edge additions and deletions, we sought to characterize degree sequences of such graphs. We conjecture a characterization for the degree sequence of the addition and edge deletion for many families of graphs including threshold graphs and complete multigraphs.

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