1161-05-57　　　　　　**Wesley Hamilton*** (`wham@live.unc.edu`). *A Graph Spectral Flow for Computing Nodal Deficiencies.*

In this paper we propose a spectral flow for graph Laplacians, and prove that it counts the number of nodal domains for a given Laplace eigenvector. This extends work done for Laplacians on $\mathbb{R}^n$ to the graph setting. We mention some open problems relating the topology of a graph to the analytic behaviour of its Laplace eigenvectors, and include numerical examples illustrating our flow. (Received August 06, 2020)