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Daniel S. Silver (silver@southalabama.edu) and **Susan G. Williams***

(swilliam@southalabama.edu), AL. *Alexander polynomials and Laplacian matrices.*

We generalize a theorem of Murasugi and Stoimenow (2003) by showing that the Alexander polynomial of any knot K is the sum of weights of spanning trees of an even-valence Tait graph of K , with an appropriate weighting scheme. Such a graph corresponds to a “special diagram” of the knot. We then use an idea of Louis Kauffman to extend the theorem for arbitrary diagrams. The proofs are relatively simple, making use of the Laplacian matrix of a graph. (Received March 20, 2017)