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**Veronika Furst\***, Department of Mathematics, Fort Lewis College, 1000 Rim Drive, Durango, CO 81301, and **Howard Grotts**. *A frame theoretic approach to dual multiplicity graphs.*

The inverse eigenvalue problem in graph theory is to determine all possible spectra of real symmetric (Hermitian) matrices whose off-diagonal pattern of zero/non-zero entries is given by the adjacencies of a graph. The special case of dual multiplicity graphs, or graphs that permit two distinct eigenvalues, was reintroduced from the perspective of frame theory as the characterization of graphs that have a representation by a tight frame. In this talk, we apply frame theoretic tools to select questions, such as the embedding of frame graphs in tight frame graphs and the classification of certain line graphs as tight frame graphs. (Received January 26, 2021)