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SPECTRAL PROPERTIES OF TOKEN GRAPHS

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In graph theory, there are different operations that construct a "large" graph from a "smaller" one. Then, the question is what properties of the former can be deduced (or, at least, approximated) from the properties of the latter. One of these operations that recently received some attention in the literature is the construction of token graphs. The k-token graph $F_k(G)$ of a graph G is the graph whose vertices are the k-subsets of vertices from G, two of which being adjacent whenever their symmetric difference is a pair of adjacent vertices in G.

In this talk, we'll discuss some interesting facts about spectral properties of token graphs.

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