Sigma Connectivity, Cographs, and Flower Graphs

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Cographs, or complement-reducible graphs are a well known hereditary family of graphs with a wide variety of applications and characterizations. In this talk we will look at applications of cographs to $\Sigma$-Connectivity, a new measure of graph connectivity introduced by the authors in 2016. In addition to proving results about $\Sigma$-connectivity, we also introduce a family of flower graphs, which serve a useful contrasting role to the cographs in our paradigm. We also hope to describe some open questions around computability for our graphs.

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