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Michael Barrus* (barrus@uri.edu). *Realization graphs of degree sequences.*

Given the degree sequence d of a simple graph, the realization graph of d is the graph having as its vertices the labeled realizations of d , with two vertices adjacent if one realization may be obtained from the other via an edge-switching operation. After a brief survey of known results on realization graphs, we describe a connection between Cartesian products in realization graphs and a degree sequence decomposition introduced by Tyshkevich. We also present results on the connectivity and induced subgraphs of realization graphs, in particular characterizing the degree sequences whose realization graphs are triangle-free graphs or hypercubes. (Received July 08, 2016)