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*A matrix method for resolving sets in Johnson graphs*

A *resolving set* for a graph  $G$  is a subset of vertices with the property that the list of distances from a vertex to the chosen set uniquely identifies that vertex. The *metric dimension* of  $G$  is the smallest size of a resolving set.

In this talk, we use incidence matrices of set systems to obtain resolving sets for the Johnson graph  $J(n, k)$ , and show how some interesting combinatorial objects can be used.