Split Domination Results for Tournaments with Connected Domination Graphs

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In graphs, the split domination number is quite elusive, as general graphs lead to many possibilities. The same is true for the split domination number of directed graphs. A vertex set S in a strongly connected digraph D is *split dominating* provided it: 1) dominates all other vertices in D, and 2) $D - S$ is trivial or not strongly connected. The set of tournaments with connected domination graphs gives us a collection of digraphs with special relationships between the vertices. In this talk, we begin to look at the relationships that give us known split domination numbers. Even more than the numbers themselves, the structures of S and $D - S$ are an interesting study.