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Digraph Analogues of Nice Graph Classes

I will discuss some recently studied classes of digraphs that are natural analogues of popular graph classes, including analogues of split graphs, interval graphs, and chordal graphs. In each case, the digraph class extends the corresponding graph class, admits a polynomial recognition algorithm, and a structural obstruction characterization. In some classes, natural problems that are NP-complete for general digraphs can be solved in polynomial time. Open problems will be presented. This reports on joint work with T. Feder, C. Hernandez Cruz, J. Huang, and A. Rafiey.