The Competition Graph of a Local Tournament

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A tournament is an oriented complete graph. An oriented graph D is called an in-tournament provided for each $x \in V(D)$, $N^-(x)$ induces a tournament. An oriented graph D is called an out-tournament provided for each $x \in V(D)$, $N^+(x)$ induces a tournament. An oriented graph that is both an in-tournament and an out-tournament is called a local tournament. The competition graph of a digraph D is the graph on the same vertex set as D with edge $\{x,y\}$ in the competition graph $\Leftrightarrow N_D^+(x) \cap N_D^+(y) \neq \emptyset$. We consider the competition graphs of local tournaments.

Keywords: competition graph, local tournament