1047-05-129 Molly Dunkum and Peter Hamburger* (peter.hamburger@wku.edu), 1906 College Heights Blvd#11078, Bowling Green,, KY 42101, and Attila Pór. On the Chudnovsky, Seymour, and Sullivan's conjecture.

For a simple directed graph G, let $\beta(G)$ be the size of the smallest subset $X \in E(G)$ so that $G \setminus X$ has no directed cycles, and let $\gamma(G)$ denote the number of unordered pairs of nonadjacent vertices in G. Chudnovsky, Seymour, and Sullivan showed that $\beta(G) \leq \gamma(G)$, and conjectured that $\beta(G) \leq \frac{\gamma(G)}{2}$. We show that $\beta(G) < \gamma(G)$. (Received January 24, 2009)