Zbl 267.05104
Erdős, Paul; Fried, E.; Hajnal, András; Milner, E.C.
Some remarks on simple tournaments. (In English)
Algebra universalis 2, 238-245 (1972).

A tournament consists of a set T of points on which is defined a complete, anti-symmetric, irreflexive binary relation ρ. A non-empty proper subset X of T is convex if for each $y \in T - X$ either $x\rho y$ for all $x \in X$ or $y\rho x$ for all $x \in X$. A tournament is simple if it has no convex subsets with more than one point. The authors prove that almost all finite tournaments are simple and that for any tournament T with $|T| \neq 2$ there exists a simple tournament R such that $T \subset R$ and $|R - T| = 2$. (Criteria for a tournament to have a simple one-point extension have been given by the reviewer [Discrete Math. 2, 389-395 (1972; Zbl 236.05108)] when T is finite and by *P. Erdős, A. Hajnal* and *E. C. Milner* [Mathematika, London 19, 57-62 (1972; Zbl 242.05113)] in the general case.)

J.W.Moon

Classification:
05C20 Directed graphs (digraphs)