1033-05-124 **Guantao Chen***, Department of Mathematics and Statistics, Georgia State University, Atlanta, GA 30303, and **Arthur Busch** and **Michael S Jacobson**. *Partitioning Tournaments into Two Transitive Subtournaments.* Preliminary report.

A tournament is *transitive* if it contains no direct cycle. Let $T[V, E]$ be a tournament with vertex set V and edge set E. A partition $A \cup B$ of V is called a *transitive partition* if $[A]$ and $[B]$, the subtournaments induced by A and B respectively, are transitive. The non-decreasing sequence of out-degrees of T is called the score sequence of T and denoted by $s(T)$. A sequence S nonnegative integers is called a *score sequence* if there exists a tournament T such that $s(T) = S$. Let $\mathcal{S}$ be the set of tournaments T such that $s(T) = S$.

Acosta et al. proved that *if S is a score sequence of length n and $n_1 \leq n_2 \leq \cdots \leq n_k \leq (n+1)/2$ such that $\sum_{i=1}^{k} n_i = n$ then there is $T \in \mathcal{T}(S)$ such that $V(T)$ has a partition $\cup_{i=1}^{k} V_i$ such that $[V_i]$ is transitive for each i.*

We showed that *if S is a score sequence of length n and there is a $T \in \mathcal{T}(S)$ having a transitive partition $A \cup B$ such that $|A| \geq |B|$ then, for each positive integer k such that $|A| \geq k \geq n/2$, there exists a $T^* \in \mathcal{T}(S)$ such that T^* has a transitive partition $C \cup D$ with $|C| = k$.* Our result gives the above result as an immediate consequence. (Received September 07, 2007)