1064-05-72   **Dan Roberts*** (`dpr0003@auburn.edu`), Dept. of Mathematics and Statistics, Auburn University, Auburn, AL 36849-5310, Auburn, AL 36849, and **Amin Bahmanian**. *On Hyperstar Decompositions of Hypergraphs.*

A hypergraph $G = (X, \mathcal{E})$ is a *hyperstar* with center C if $C \subseteq \bigcap_{E \in \mathcal{E}} E$. The *size* of G is $|\mathcal{E}|$ and we say that G has *center size* $|C|$. We find necessary and sufficient conditions for complete uniform hypergraphs and complete hypergraphs to be decomposed into $S_{m_1}, \ldots, S_{m_\ell}$ where S_{m_i} is a hyperstar of size m_i with center size 1. (Received September 01, 2010)

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