1003-54-1122   **Elizabeth F Stepp*** (`stepp@ms.uky.edu`), 1155 Horsemans Lane 39, Lexington, KY 40504.
Large Whitney Levels and Finite Antichains. Preliminary report.

For a metric continuum, X, $C(X)$ is the set of all subcontinua with the Hausdorff metric. $C(X)$ is itself a continuum and the partial order of set containment has a closed graph. An *antichain* in $C(X)$ is a subset of $C(X)$ such that if $A, B \in X$, then $A \subset B$ and $B \subset A$ are both false. A subset $\mathcal{A}$ of $C(X)$ is called a *Whitney level* in $C(X)$ if it is a point inverse of a strict order-preserving map $\mu : C(X) \to [0,1]$ that takes all singletons, $\{x\}$, to 0. Alejandro Illanes in *The Space of Whitney Levels* introduces and defines some fundamentals in studying this special subset, $N(X)$ of $C(C(X))$. This paper examines the closure of $N(X)$, namely when $C(X) \in \overline{N(X)}$. We notice the answer to this question is continuum specific and explore continua such as the unit interval, the disc, the bucket handle, and the harmonic fan. We discover that the answer to this question can be reduced to : Are there arbitrarily large finite antichains? With this result, we are able to answer the original question for specific classes of coninua. (Received October 04, 2004)