

Meeting: 1006, Lubbock, Texas, SS 1A, Special Session on Topology of Continua

1006-54-71 **Sergio Macias*** (macias@servidor.unam.mx), Instituto de Matematicas, UNAM, Circuito Exterior, Ciudad Unviersitaria, 04510 Mexico City, D. F., Mexico. *On the n -fold hyperspace suspensions of continua.*

A continuum is a compact connected metric space. Given a positive integer n , we define the n -fold symmetric product and the n -fold hyperspace of a continuum X by $F_n(X) = \{A \subset X \mid A \neq \emptyset \text{ and } A \text{ has at most } n \text{ points}\}$ and $C_n(X) = \{A \subset X \mid A \neq \emptyset \text{ } A \text{ is closed and has at most } n \text{ components}\}$.

In 1979 Sam B. Nadler, Jr. defined the hyperspace suspension of a continuum X as $HS(X) = C_1(X)/F_1(X)$. We study a natural generalization of such hyperspace using n -fold hyperspaces as follows. The n -fold hyperspace suspension of a continuum X is $HS_n(X) = C_n(X)/F_n(X)$.

We present some basic properties of the n -fold hyperspace suspensions. (Received February 03, 2005)