1077-VJ-2191   **Casey L Sherman*** (`Casey_Sherman@baylor.edu`). *A Characterization of Homeomorphisms on Cantor Sets by Orbit Structures.*

We consider the following problem: Given a set X and a function $T : X \to X$, does there exist a topology on X for which T a homeomorphism and X a Cantor set? This question is answered in terms of the orbit structure of the functions. (Received September 21, 2011)