1044-54-116 William S. Mahavier* (wsm@emory.edu), Department of Mathematics and CS, Emory University, Atlanta, GA 30322, and W. T. Ingram. Inverse limits with upper semi-continuous functions.
If $X_{1}, X_{2}, X_{3}, \ldots$ is a sequence of compact Hausdorff spaces and $\mathbf{f}=f_{1}, f_{2}, f_{3}, \ldots$ where for each positive integer $i, f_{i}$ is an upper semi-continuous function from $X_{i+1}$ into $2^{X_{i}}$, the inverse limit of $\mathbf{f}$ is the subset of $\prod_{i>0} X_{i}$ consisting of all points $x_{1}, x_{2}, x_{3}, \ldots$ such that for each $i, x_{i} \in f_{i}\left(x_{i+i}\right)$. We will discuss this new type of inverse limit, give some examples, and discuss the contents of a book being written by Tom Ingram and myself that includes generalizations to partially ordered sets. (Received August 26, 2008)

