

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, \dots is a sequence of compact Hausdorff spaces and $\mathbf{f} = f_1, f_2, f_3, \dots$ 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, \dots such that for each i , $x_i \in f_i(x_{i+1})$. 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)