Planar embeddings of unimodal inverse limit spaces

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We study the family $\{X_s\}_{s\in[0,1]}$ of inverse limit spaces with tent map bonding maps $T_s : [0,1] \to [0,1]$, $T_s(x) = \min\{sx, s(1-x)\}$. It is a well known fact that X_s are chainable continua. The study of planar embeddings of chainable continua dates back to 1951 when Bing proved that every chainable continuum can be embedded in the plane. The first explicit class of planar embeddings of X_s was given by Brucks and Diamond in 1995 and Bruin in 1999. Recently, Boyland, de Carvalho and Hall constructed a family of continuously varying family of disk homeomorphisms having X_s as global attracting sets. For certain parameters s, continua X_s have a very rich local structure so it would be interesting to see what kind of planar embeddings of complicated X_s are possible. In this talk we will demonstrate the method of explicit construction of uncountably many non-equivalent planar embeddings of X_s using the description of X_s arising from the symbolic dynamics of T_s. We prove the following

Theorem   *For every $s \in [0,1]$ and every point $x \in X_s$ there exists an embedding of X_s in the plane such that x is accessible from the complement.*