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Kourosh Tavakoli* (tavakoli@fordham.edu). *Iterated Holomorphic Function Systems.*

Consider all the backward iterated function systems corresponding to the sequences of holomorphic functions from the unit disk D into a subdomain X . Lorentzen and Gill showed that if X is relatively compact in D , then every iterated function system has a unique limit function which is a constant inside X . In other words, they showed that relative non-compactness of X is necessary in order to have a boundary point as a limit function. Keen and Lakic used the notion of hyperbolic Bloch domain, first introduced by Beardon et al., and showed that if X is not Bloch in D , every boundary point of X is a limit function of some iterated function system. In this talk we generalize this result and show that relative non-compactness of X in D is a sufficient condition to have a boundary point as a limit function. (Received September 15, 2007)