Planar embeddings of inverse limit spaces of unimodal maps

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Given a point x from an inverse limit space of unimodal maps X we construct a planar embedding of X making the point x accessible from the complement of X. With this construction described in [1] we obtain uncountably many embeddings of X which are not equivalent to two well-known standard embeddings, described in [2] and [3]. I will also discuss the extendability of the shift homeomorphism σ on the plane for the constructed embeddings.

References

- A. Anušić, H. Bruin, J. Činč, Uncountably many planar embeddings of unimodal inverse limit spaces, arXiv:1603.03887, Preprint (2016).
- [2] K. Brucks, B. Diamond, A symbolic representation of inverse limit spaces for a class of unimodal maps, Continuum Theory and Dynamical Systems, Lecture Notes in Pure Appl. Math. 149 (1995), 207–226.
- [3] H. Bruin, Planar embeddings of inverse limit spaces of unimodal maps, Topology Appl. 96 (1999), 191–208.