Towards the complete classification of tent maps inverse limits

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Abstract

We study tent map inverse limits, i.e. inverse limits of inverse sequences of unit segments I with a tent map being the only bonding function. As the main result we identify an infinite family of curves in I^2 such that if top vertices of graphs of tent maps belong to the same curve, the corresponding inverse limits are homeomorphic, and if they belong to different curves, the inverse limits are non-homeomorphic. The inverse limits corresponding to certain families of top vertices will be explicitely determined, and certain properties of the inverse limit will be proved in the case of $(0, 1)$ as the top vertex.

2010 Mathematics Subject Classification: 54C60, 54B10.

References

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