

Towards the understanding of inhomogeneities in strange attractors

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Brown-Barge-Martin embeddings of inverse limits provide a natural way to construct curious examples of strange attractors arising from homeomorphisms on manifolds of dimension at least two. In the recent years we were building towards the better understanding of inhomogeneities of such strange attractors, starting with the ones arising from unimodal interval maps [1]. In this talk I will review the part of the work that was done on inverse limits of one-dimensional manifolds [2]. Namely, I will show that in such a setting we have complete understanding of basic types of inhomogeneities (i.e. folding points and endpoints) through the dynamics of bonding maps when these are piecewise monotone and locally eventually onto. If time permits I will also discuss work in progress [3] that generalises and applies these results.

References

- [1] L. Alvin, A. Anušić, H. Bruin, J. Činč, *Folding points of unimodal inverse limit spaces*, *Nonlinearity* **33** (2020) 224–248.
- [2] A. Anušić, J. Činč, *Inhomogeneities in chainable continua*, *Fundamenta Mathematicae* **254** (2021) 69–98. (Appendix written by Henk Bruin)
- [3] A. Anušić, J. Činč, *Solenoidal and non-solenoidal points in one-dimensional attractors*, in preparation.