

# Inverse limits of interval maps: to apply and classify

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Bob Williams showed in the 1960s that the attractor of every hyperbolic map can be considered as the inverse limit space of a mapping on a branched manifold. This itself may not be such a step forward if you don't understand too well such inverse limit spaces, and already in dimension one, this is a non-trivial undertaking. In this lecture, I would like to give a summary of what we know about the inverse limit space of a unimodal interval map, and discuss their subcontinua and (solution to) their classification problem, known as the Ingram Conjecture.

## References and Literature for Further Reading

- [1] M. Barge, H. Bruin and S. Štimac, The Ingram conjecture, *to appear in Geometry and Topology*.
- [2] H. Bruin and S. Štimac, On isotopy and unimodal inverse limit space, *Discrete and Continuous Dynamical Systems* **32** (2012), 1245-1253.
- [3] R. F. Williams, Classification of one dimensional attractors, *1970 global analysis (proc. sympos. pure math., vol. xiv, berkeley, calif., 1968)* (1970), 341-361, AMS., Providence, R.I.