

Transience and thermodynamics for a class of infinitely branched maps

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Abstract.

I'll describe a one-parameter family of countably piecewise linear interval maps F_λ , which, although Markov, fail the 'large image property'. This leads to conservative as well as dissipative behaviour for different maps in the family with respect to Lebesgue. I'll explain this as part of the wider thermodynamic formalism for these maps. A particularly nice feature here is that many interesting thermodynamic quantities can be computed explicitly: the natural pressure function (which exhibits interesting phase transitions), and the corresponding conformal and equilibrium measures. This is joint work with Henk Bruin, and the connection between this class of maps and certain unimodal maps, along with the results this yields (which motivated this work) will be explained in his talk.