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Entropy of transitive dendrite maps

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It was proved by Blokh (1982) that a transitive map on the interval has the topological entropy at least $\log 2/2$ and that this bound is the best possible. Later Alsedà, Kolyada, Llibre and Snoha (1997) showed that on stars the infimum of entropies of transitive maps is $\log 2/p$, where p is the number of end points of the star. The topological entropy of transitive maps on more general trees was studied e.g. by Alsedà, Baldwin, Llibre and Misiurewicz (1997), Ye (2000) and Baldwin (2001).

In this talk we present some results concerning the entropy of transitive maps on dendrites. We first show that every dendrite admits an exact map with finite entropy. Using this fact we show that, for certain dendrites, the infimum of entropies of transitive maps is zero.