CONTINUITY OF SRB MEASURE AND ENTROPY FOR NONUNIFORMLY EAPANDING 1D MAPS

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ABSTRACT. We consider familes of nonuniformly expanding 1D maps which is introduced by Q. Wang and L. S. Young containing the quadratic family $f_1(x) = 1 - ax^2$ as a special case. We prove that the volume of the set of points which do not have an exponential growth of the derivative, decays exponentially fast. We also prove that the set of points that are not slowly recurrent to the critical set decays sub-exponentially. From these, we prove the continuity of the SRB measrues and the entropy of the SRB measures.