MR2089535 (2005m:37080) 37E05 (26A18 37A25 37B10 37C30 37D20 39B12)
Fernandes, Sara (P-EVOR); Sousa Ramos, José (P-TULT)
Spectral invariants of iterated maps of the interval. (English summary)

The authors consider continuous expanding maps $S$ on the interval. If $S$ is mixing, then the second largest (in modulus) eigenvalue of the Perron-Frobenius operator determines the decay of correlations. This eigenvalue is calculated by the authors for piecewise linear Markov maps assuming that the modulus of the slope is constant. Although the corresponding result is only stated in the continuous case, it also holds (with the same proof) if $S$ is allowed to be discontinuous at the endpoints of the linear pieces. Finally, the authors apply this result to a class of unimodal maps and to a class of bimodal maps.

{For the entire collection see MR2093669 (2005d:00013)}

Reviewed by Peter Raith

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