

[Rees, Mary](#)

Ergodic rational maps with dense critical point forward orbit. (English) Zbl 0553.58008
Ergodic Theory Dyn. Syst. 4, 311-322 (1984).

A proof is given of the fact that a rational map with all critical points eventually mapping to expanding periodic orbits is ergodic with respect to Lebesgue measure. It is shown that in many smooth families of rational maps, if A is the set of functions with all critical points eventually periodic, then \bar{A} is uncountable, and contains functions which are ergodic with respect to Lebesgue measure and have dense critical point forward orbit.

MSC:

[58E05](#) Abstract critical point theory (Morse theory, Lyusternik-Shnirel'man theory, etc.) in infinite-dimensional spaces Cited in 9 Documents
[37A99](#) Ergodic theory
[37G99](#) Local and nonlocal bifurcation theory for dynamical systems

Keywords:

[rational map](#); [Julia set](#); [ergodic](#); [critical point](#)

Full Text: [DOI](#)

References:

[1] DOI: 10.1007/BF02591353 · Zbl 0127.03401 · doi:10.1007/BF02591353

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.