

**Lei, Tan**

**Matings of quadratic polynomials.** (English) Zbl 0756.58024  
*Ergodic Theory Dyn. Syst.* 12, No. 3, 589-620 (1992).

We apply Thurston's equivalence theory between dynamical systems of postcritically finite branched coverings and rational maps to try to construct, from a pair of polynomials, a rational map. We prove that given two postcritically finite quadratic polynomials  $f_c : z \mapsto z^2 + c$  and  $f_{c'} : z \mapsto z^2 + c'$  one can get a rational map if and only if  $c, c'$  are not in conjugate limbs of the Mandelbrot set.

Reviewer: T.Lei (Lyon)

**MSC:**

**37B99** Topological dynamics  
**30D05** Functional equations in the complex plane, iteration and composition of analytic functions of one complex variable

Cited in **1** Review  
Cited in **33** Documents

**Keywords:**

holomorphic dynamical system; iteration of polynomials; rational maps

**Full Text:** [DOI](#)

**References:**

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