

1. Record Nr.	UNINA9910465330803321
Autore	Graczyk Jacek
Titolo	The real Fatou conjecture / / by Jacek Graczyk and Grzegorz Swiatek
Pubbl/distr/stampa	Princeton, New Jersey : , : Princeton University Press, , 1998 {copy}1998
ISBN	0-691-00257-6 1-4008-6518-2
Descrizione fisica	1 online resource (158 p.)
Collana	Annals of Mathematics Studies ; ; Number 144
Disciplina	516.3/62
Soggetti	Geodesics (Mathematics) Polynomials Mappings (Mathematics) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front matter -- Contents -- Chapter 1. Review of Concepts -- Chapter 2. Quasiconformal Gluing -- Chapter 3. Polynomial-Like Property -- Chapter 4. Linear Growth of Moduli -- Chapter 5. Quasi conformal Techniques -- Bibliography -- Index
Sommario/riassunto	In 1920, Pierre Fatou expressed the conjecture that--except for special cases--all critical points of a rational map of the Riemann sphere tend to periodic orbits under iteration. This conjecture remains the main open problem in the dynamics of iterated maps. For the logistic family $x - ax(1-x)$, it can be interpreted to mean that for a dense set of parameters "a," an attracting periodic orbit exists. The same question appears naturally in science, where the logistic family is used to construct models in physics, ecology, and economics. In this book, Jacek Graczyk and Grzegorz Swiatek provide a rigorous proof of the Real Fatou Conjecture. In spite of the apparently elementary nature of the problem, its solution requires advanced tools of complex analysis. The authors have written a self-contained and complete version of the argument, accessible to someone with no knowledge of complex dynamics and only basic familiarity with interval maps. The book will thus be useful to specialists in real dynamics as well as to graduate

students.
