

1. Record Nr.	UNINA9910812639703321
Autore	Milnor John W (John Willard), <1931->
Titolo	Dynamics in one complex variable // by John Milnor
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, 2006
ISBN	1-283-00148-9 9786613001481 1-4008-3553-4
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (313 p.)
Collana	Annals of mathematics studies ; ; no. 160
Classificazione	SI 830
Disciplina	515.93 515/.93
Soggetti	Functions of complex variables Holomorphic mappings Riemann surfaces
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 (p. 277-291) and index.
Nota di contenuto	Frontmatter -- Table Of Contents -- List of Figures -- Preface to the Third Edition -- Chronological Table -- Riemann Surfaces -- Iterated Holomorphic Maps -- Local Fixed Point Theory -- Periodic Points: Global Theory -- Structure of the Fatou Set -- Using the Fatou Set to Study the Julia Set -- Appendix A. Theorems from Classical Analysis -- Appendix B. Length-Area-Modulus Inequalities -- Appendix C. Rotations, Continued Fractions, and Rational Approximation -- Appendix D. Two or More Complex Variables -- Appendix E. Branched Coverings and Orbifolds -- Appendix F. No Wandering Fatou Components -- Appendix G. Parameter Spaces -- Appendix H. Computer Graphics and Effective Computation -- References -- Index
Sommario/riassunto	This volume studies the dynamics of iterated holomorphic mappings from a Riemann surface to itself, concentrating on the classical case of rational maps of the Riemann sphere. This subject is large and rapidly growing. These lectures are intended to introduce some key ideas in the field, and to form a basis for further study. The reader is assumed to be familiar with the rudiments of complex variable theory and of two-dimensional differential geometry, as well as some basic topics from topology. This third edition contains a number of minor additions

and improvements: A historical survey has been added, the definition of Lattés map has been made more inclusive, and the écalle-Voronin theory of parabolic points is described. The résidu itératif is studied, and the material on two complex variables has been expanded. Recent results on effective computability have been added, and the references have been expanded and updated. Written in his usual brilliant style, the author makes difficult mathematics look easy. This book is a very accessible source for much of what has been accomplished in the field.
