This is a comprehensive introduction to holomorphic dynamics, that is the dynamics induced by the iteration of various analytic maps in complex number spaces. This has been the focus of much attention in recent years, with, for example, the discovery of the Mandelbrot set, and work on chaotic behavior of quadratic maps. The treatment is mathematically unified, emphasizing the substantial role played by classical complex analysis in understanding holomorphic dynamics as well as giving an upto-date coverage of the modern theory. The authors cover entire functions, Kleinian groups and polynomial automorphisms of several complex variables such as complex Hénon maps, as well as the case of rational functions.

The book will be welcomed by graduate students and professionals in pure mathematics and science who seek a reasonably self-contained introduction to this exciting area.

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EDITORS

W. Fulton University of Chicago

T. tom Dieck University of Göttingen

P. Walters Warwick University



