

1. Record Nr.	UNINA9910453689503321
Autore	Chapman Robin S
Titolo	Images of a complex world [[electronic resource]] : the art and poetry of chaos / / Robin Chapman, Julien Clinton Sprott ; foreword by Clifford A. Pickover
Pubbl/distr/stampa	River Edge, NJ, : World Scientific, c2005
ISBN	1-281-92792-9 9786611927929 981-277-511-0
Descrizione fisica	1 online resource (195 p.)
Altri autori (Persone)	SprottJulien C
Disciplina	003/.857
Soggetti	Dynamics Chaotic behavior in systems Fractals Nonlinear theories Mathematics in art Mathematics in literature Digital art 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 indexes.
Nota di contenuto	Foreword; Preface; Acknowledgements; Contents; Chapter 1 Dynamical Systems; Dynamical Systems; Simple or Complex?; Linear or Nonlinear?; Chapter 2 Viewing Dynamics; Where Do We Go Next? (Time Series); Chapter 3 Where It All Ends; Attractors; Stillness (Fixed Points); Endless Repetition (Limit Cycles); Doughnuts and Inner Tubes (Tori); Strange Attractors (Chaos); Chapter 4 Routes to Chaos; Fork in the Road (Bifurcations); Skipping a Beat (Period-doubling); On the Edge of Chaos; Chapter 5 Images of Chaos; Chaos or Noise?; Strange Attractors; Stretching and Moving (Iterated Function Systems) Escaping the Attractor (Generalized Julia Sets)Chapter 6 Chaos and Predictability; Time's Arrow; The Butterfly Effect (Sensitive Dependence); Chapter 7 Truth and Beauty; Fractals; Mirror images;

Flower Petals; Appendix for the Mathematically Inclined; Index of Images; Test Your Understanding; For Further Reading; Contents of the CD-ROM; About the Authors; Index

Sommario/riassunto

With the poems written by winner of the Posner Poetry Award from the Council of Wisconsin Writers in 2005, this coffee-table book will delight and inform general readers curious about ideas of chaos, fractals, and nonlinear complex systems. Developed out of ten years of interdisciplinary seminars in chaos and complex systems at the University of Wisconsin-Madison, it features multiple ways of knowing: Robin Chapman's poems of everyday experience of change in a complex world, associated metaphorically with Julien Clinton Sprott's full-color computer art generated from billions of versions of on
