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Nota di contenuto	Contents ; Foreword ; Preface ; Introduction ; I. The simple pendulum ; II. A dissipative system ; III. The spherical pendulum ; IV. Vector fields and dynamical systems ; Chapter 1. Some Simple Examples ; I. Flows and homeomorphisms ; II. Orbits III. Examples of dynamical systems IV. Constructing systems ; V. Properties of orbits ; Appendix 1 ; I. Group actions ; Chapter 2. Equivalent Systems ; I. Topological conjugacy ; II. Homeomorphisms of the circle ; III. Flow equivalence and topological equivalence IV. Local equivalence V. Limit sets of flows ; VI. Limit sets of homeomorphisms ; VII. Non- wandering sets ; Appendix 2 ; I. Two topological lemmas ; II. Oriented orbits in Hausdorff spaces ; III. Compactification ; Chapter 3. Integration of Vector Fields ; I. Vector fields II. Velocity vector fields and integral flows III. Ordinary differential equations ; IV. Local

integrals ; V. Global integrals ;
 Appendix 3 ; I. Integrals of perturbed vector fields
 ; II. First integrals ; Chapter 4. Linear Systems
 ; I. Linear flows on $\mathbb{R}^n$
 II. Linear automorphisms of $\mathbb{R}^n$ III. The spectrum
 of a linear endomorphism ; IV.
 Hyperbolic linear automorphisms ; V.
 Hyperbolic linear vector fields ; Appendix 4
 ; I. Spectral Theory ; Chapter 5. Linearization
 ; I. Regular points ; II. Hartman's theorem
 III. Hartman's theorem for flows

Sommario/riassunto

This is a reprint of M C Irwin's beautiful book, first published in 1980.
 The material covered continues to provide the basis for current
 research in the mathematics of dynamical systems. The book is
 essential reading for all who want to master this area. Request
 Inspection Copy
<i>Contents: </i>Some Simple
 ExamplesEquivalent SystemsIntegration of Vector
 FieldsLinear Systems, Linearization, Stable
 ManifoldsStable
 SystemsAppendices
<i>Readership:
 </i>Graduate students in mathematics.
