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Autore	Gilmore Robert
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3.11 Summary

	Chapter 4: Topological Invariants4.1 Stretching and Squeezing Mechanisms; 4.2 Linking Numbers; 4.3 Relative Rotation Rates; 4.4 Relation between Linking Numbers and Relative Rotation Rates; 4.5 Additional Uses of Topological Invariants; 4.6 Summary; Chapter 5: Branched Manifolds; 5.1 Closed Loops; 5.2 What Does This Have to Do with Dynamical Systems?; 5.3 General Properties of Branched Manifolds; 5.4 Birman-Williams Theorem; 5.5 Relaxation of Restrictions; 5.6 Examples of Branched Manifolds; 5.7 Uniqueness and Nonuniqueness; 5.8 Standard Form; 5.9 Topological Invariants 5.10 Additional Properties5.11 Subtemplates; 5.12 Summary; Chapter 6: Topological Analysis Program; 6.1 Brief Summary of the Topological Analysis Program; 6.2 Overview of the Topological Analysis Program; 6.3 Data; 6.4 Embeddings; 6.5 Periodic Orbits; 6.6 Computation of Topological Invariants; 6.7 Identify Template; 6.8 Validate Template; 6.9 Model Dynamics; 6.10 Validate Model; 6.11 Summary; Chapter 7: Folding Mechanisms: A2; 7.1 Belousov-Zhabotinskii Chemical Reaction; 7.2 Laser with Saturable Absorber; 7.3 Stringed Instrument; 7.4 Lasers with Low-Intensity Signals; 7.5 The Lasers in Lille 7.6 The Laser in Zaragoza7.7 Neuron with Subthreshold Oscillations; 7.8 Summary; Chapter 8: Tearing Mechanisms: A3; 8.1 Lorenz Equations; 8.2 Optically Pumped Molecular Laser; 8.3 Fluid Experiments; 8.4 Why A3?; 8.5 Summary; Chapter 9: Unfoldings; 9.1 Catastrophe Theory as a Model; 9.2 Unfolding of Branched Manifolds: Branched Manifolds as Germs; 9.3 Unfolding within Branched Manifolds: Unfolding of the Horseshoe; 9.4 Missing Orbits; 9.5 Routes to Chaos; 9.6 Orbit Forcing and Topological Entropy: Mathematical Aspects; 9.7 Topological Measures of Chaos in Experiments; 9.8 Summary Chapter 10: Symmetry	
Sommario/riassunto	A highly valued resource for those who wish to move from the introductory and preliminary understandings and the measurement of chaotic behavior to a more sophisticated and precise understanding of chaotic systems. The authors provide a deep understanding of the structure of strange attractors, how they are classified, and how the information required to identify and classify a strange attractor can be extracted from experimental data. In its first edition, the Topology of Chaos has been a valuable resource for physicist and mathematicians interested in the topological analysis of dynamical	