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Autore	Calin Ovidiu
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Nota di contenuto	Part I: The Geometry of Statistical Models -- Statistical Models -- Explicit Examples -- Entropy on Statistical Models -- Kullback–Leibler Relative Entropy -- Informational Energy -- Maximum Entropy Distributions -- Part II: Statistical Manifolds -- An Introduction to Manifolds -- Dualistic Structure -- Dual Volume Elements -- Dual Laplacians -- Contrast Functions Geometry -- Contrast Functions on Statistical Models -- Statistical Submanifolds -- Appendix A: Information Geometry Calculator.
Sommario/riassunto	This book covers topics of Informational Geometry, a field which deals with the differential geometric study of the manifold probability density functions. This is a field that is increasingly attracting the interest of researchers from many different areas of science, including mathematics, statistics, geometry, computer science, signal processing, physics and neuroscience. It is the authors' hope that the present book will be a valuable reference for researchers and graduate students in one of the aforementioned fields. This textbook is a unified presentation of differential geometry and probability theory, and constitutes a text for a course directed at graduate or advanced

undergraduate students interested in applications of differential geometry in probability and statistics. The book contains over 100 proposed exercises meant to help students deepen their understanding, and it is accompanied by software that is able to provide numerical computations of several information geometric objects. The reader will understand a flourishing field of mathematics in which very few books have been written so far.