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**Encyclopedia of distances.** (English)

Berlin: Springer. xiv, 590 p., with CD-ROM. EUR 149.95/net; SFR 249.00; \$ 229.00; £ 130.00 (2009). ISBN 978-3-642-00233-5/hbk; ISBN 978-3-642-00234-2/ebook

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This ‘Encyclopedia of distances’ is a rich source of material on definitions in connection with the notion “distance” in different areas of mathematics and applied sciences. This includes distances in (convex) geometry, probability, statistics, coding/graph theory, data analysis, pattern recognition, computer networks, computer graphics, astronomy, astrology, biology, physics, chemistry and also in areas like economy, philosophy and medicine.

The book is not just a collection of definitions, but in most cases it includes an introduction into the corresponding theory. The book allows to refresh one’s own knowledge and also to learn about new notions of distances in the domains listed above.

In this way, the book serves not only as a reference book but also as an introduction of distances in several other scientific fields. Altogether, the book is recommended not only for students in the undergraduate and graduate level, but also for scientists in mathematics and other related fields.

A CD-Rom is included.

*Gertraud Ehrig (Berlin)*

*Classification :*

- \*51-00 Reference works (geometry)
- 53-00 Reference works (differential geometry)
- 55-00 Reference works (algebraic topology)
- 52A10 Convex sets in 2 dimensions (including convex curves)
- 52A20 Convex sets in n dimensions
- 57M25 Knots and links in the 3-sphere
- 51K05 General theory of distance geometry