

Librería
Bonilla y Asociados
desde 1950



Título:

Autor:

Precio: \$1459.20

Editorial:

Año: 2013

Tema:

Edición: 1ª

Sinopsis

ISBN: 9789814440097

This book provides a comprehensive introduction to Finsler geometry in the language of present-day mathematics. Through Finsler geometry, it also introduces the reader to other structures and techniques of differential geometry.

Prerequisites for reading the book are minimal: undergraduate linear algebra (over the reals) and analysis. The necessary concepts and tools of advanced linear algebra (over modules), point set topology, multivariable calculus and the rudiments of the theory of differential equations are integrated in the text. Basic manifold and bundle theories are treated concisely, carefully and (apart from proofs) in a self-contained manner.

The backbone of the book is the detailed and original exposition of tangent bundle geometry, Ehresmann connections and sprays. It turns out that these structures are important not only in their own right and in the foundation of Finsler geometry, but they can be also regarded as the cornerstones of the huge edifice of Differential Geometry.

The authors emphasize the conceptual aspects, but carefully elaborate calculative aspects as well (tensor derivations, graded derivations and covariant derivatives). Although they give preference to index-free methods, they also apply the techniques of traditional tensor calculus.

Most proofs are elaborated in detail, which makes the book suitable for self-study. Nevertheless, the authors provide for more advanced readers as well by supplying them with adequate material, and the book may also serve as a reference.

Readership: Undergraduate and graduate students of mathematics, graduate students of physics, researchers and professionals in differential geometry and mathematical physics.