

Conformal Groups in Geometry and Spin Structures

Conformal groups play a key role in geometry and spin structures. This book provides a self-contained overview of this important area of mathematical physics, beginning with its origins in the works of Cartan and Chevalley and progressing to recent research in spinors and conformal geometry.

Key topics and features:

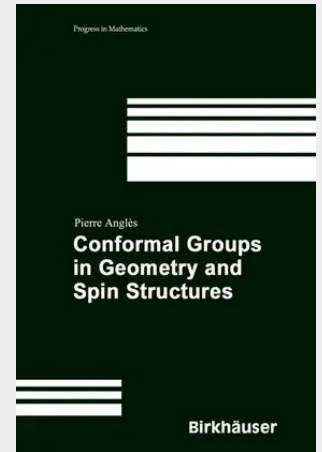
- * Focuses initially on the basics of Clifford algebras
- * Studies the spaces of spinors for some even Clifford algebras
- * Examines conformal spin geometry, beginning with an elementary study of the conformal group of the Euclidean plane
- * Treats covering groups of the conformal group of a regular pseudo-Euclidean space, including a section on the complex conformal group
- * Introduces conformal flat geometry and conformal spinoriality groups, followed by a systematic development of riemannian or pseudo-riemannian manifolds having a conformal spin structure
- * Discusses links between classical spin structures and conformal spin structures in the context of conformal connections
- * Examines pseudo-unitary spin structures and pseudo-unitary conformal spin structures using the Clifford algebra associated with the classical pseudo-unitary space
- * Ample exercises with many hints for solutions
- * Comprehensive bibliography and index

This text is suitable for a course in mathematical physics at the advanced undergraduate and graduate levels. It will also benefit researchers as a reference text.

Conformal groups play a key role in geometry and spin structures. This book provides a self-contained overview of this important area of mathematical physics, beginning with its origins in the works of Cartan and Chevalley and progressing to recent research in spinors and conformal geometry. Key topics and features:

- * Focuses initially on the basics of Clifford algebras
- * Studies the spaces of spinors for some even Clifford algebras
- * Examines conformal spin geometry, beginning with an elementary study of the conformal group of the Euclidean plane
- * Treats covering groups of the conformal group of a regular pseudo-Euclidean space, including a section on the complex conformal group
- * Introduces conformal flat geometry and conformal spinoriality groups, followed by a systematic development of riemannian or pseudo-riemannian manifolds having a conformal spin structure
- * Discusses links between classical spin structures and conformal spin structures in the context of conformal connections
- * Examines pseudo-unitary spin structures and pseudo-unitary conformal spin structures using the Clifford algebra associated with the classical pseudo-unitary space
- * Ample exercises with many hints for solutions
- * Comprehensive bibliography and index

This text is suitable for a course in mathematical physics at the advanced undergraduate and graduate levels. It will also benefit researchers as a reference text.



106,99 €
99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780817635121
Medium: Buch
ISBN: 978-0-8176-3512-1
Verlag: Birkhäuser
Erscheinungstermin: 29.11.2007
Sprache(n): Englisch
Auflage: 1. Auflage 2007
Serie: Progress in Mathematical Physics
Produktform: Gebunden
Gewicht: 635 g
Seiten: 284
Format (B x H): 160 x 241 mm

