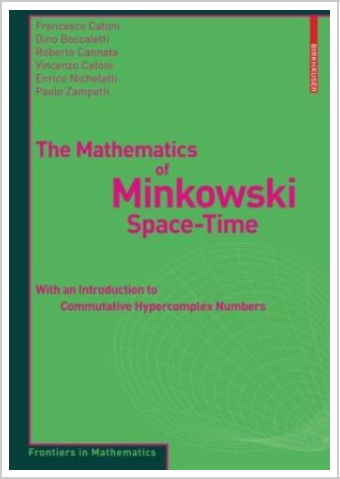

The Mathematics of Minkowski Space-Time

By Boccaletti, Dino / Catoni, Francesco

Condition: New. Publisher/Verlag: Springer, Basel | With an Introduction to Cummunitative Hypercomplex Numbers | This book arose out of original research on the extension of well-established applications of complex numbers related to Euclidean geometry and to the space-time symmetry of two-dimensional Special Relativity. The system of hyperbolic numbers is extensively studied, and a plain exposition of space-time geometry and trigonometry is given. Commutative hypercomplex systems with four unities are studied and attention is drawn to their interesting properties. | The Mathematics of Minkowski Space-Time: 1 N-Dimensional Hypercomplex Numbers and the associated Geometries.- Commutative Hypercomplex Number Systems.- The General Two-Dimensional System.- Linear Transformations and Geometries.- The Geometries Associated with Hypercomplex Numbers.- Conclusions.- 2 Trigonometry in the Minkowski Plane.- Geometrical Representation of Hyperbolic Numbers.- Basics of Hyperbolic Trigonometry.- Geometry in Pseudo-Euclidean Cartesian Plane.- Trigonometry in the Pseudo-Euclidean Plane.- Theorems on Equilateral Hyperbolas in the Pseudo-Euclidean Plane.- Some Examples of Triangle Solutions in the Minkowski Plane.- Conclusions.- 3 Uniform and Accelerated Motions in the Minkowski Space-Time (Twin Paradox).- Inertial Motions.- Inertial and Uniformly Accelerated Motions.- Non-uniformly Accelerated Motions.- Conclusions.- 4 General Two-Dimensional Hypercomplex Numbers.- Geometrical Representation.- Geometry and Trigonometry in Two-Dimensional Algebras.- Some Properties of Fundamental Conic Section.- Numerical Examples.- 5 Functions of a...

Reviews

This pdf is wonderful. It is definitely simplified but excitement from the 50 percent in the ebook. You wont sense monotony at at any time of your time (that's what catalogues are for relating to should you request me).

-- ***Jaqueline Kerluke***

I just started looking at this pdf. It can be rally fascinating throgh studying period of time. Its been printed in an extremely basic way and is particularly only following i finished reading through this publication where in fact altered me, change the way i really believe.

-- ***Mr. Stephan McKenzie***