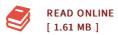




# Illustrated Special Relativity Through Its Paradoxes: A Fusion of Linear Algebra, Graphics, and Reality

By John De Pillis

J Depillis Illustrations. Paperback. Book Condition: New. Paperback. 384 pages. Dimensions: 10.0in. x 7.0in. x 0.9in. This accessible work, with its plethora of full-color illustrations by the author, shows that linear algebra --- actually, 2x2 matrices --- provide a natural language for special relativity. The book includes an overview of linear algebra with all basic definitions and necessary theorems. Since Einstein acknowledged his debt to Clerk Maxwell in his seminal 1905 paper introducing the theory of special relativity, we fully develop Maxwells four equations that unify the theories of electricity, optics, and magnetism. Using just two laboratory measurements, these equations lead to a simple calculation for the frame-independent speed of electromagnetic waves in a vacuum. (Maxwell himself was unaware that light was a special electromagnetic wave.) Before analyzing the paradoxes, we establish their linear algebraic context. Inertial frames become (2-dimensional vector spaces) whose ordered spacetime pairs (x, t) are linked by line-of-sight linear transformations. These are the Galilean transformations in classical physics, and the Lorentz transformations in the more general relativistic physics. The Lorentz transformation is easily derived once we show how a novel swiveled line theorem, (a geometric concept) is equivalent to...



### Reviews

This is an incredible ebook which i actually have ever go through. This can be for those who statte that there had not been a really worth reading. I am just quickly can get a delight of reading a published book.

-- Ms. Colleen Ziemann V

This pdf is fantastic. It typically is not going to price too much. You will not truly feel monotony at at any time of your own time (that's what catalogs are for about if you request me).

-- Leslie Reinger

# You May Also Like



Barabbas Goes Free: The Story of the Release of Barabbas Matthew 27:15-26, Mark 15:6-15, Luke 23:13-25, and John 18:20 for Children

Paperback. Book Condition: New.



Klara the Cow Who Knows How to Bow (Fun Rhyming Picture Book/Bedtime Story with Farm Animals about Friendships, Being Special and Loved. Ages 2-8) (Friendship Series Book 1)

Createspace, United States, 2015. Paperback. Book Condition: New. Apoorva Dingar (illustrator). Large Print. 214 x 149 mm. Language: English. Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*\*. Klara is a little different from the other cows, because she has a very special...



### JA] early childhood parenting :1-4 Genuine Special(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment. Paperback. Pub Date: 2006-01-01 Pages: 179 Publisher: the China Pictorial Our book is all new book of genuine special spot any...



### Read Write Inc. Phonics: Green Set 1 Non-Fiction 2 We Can All Swim!

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 217 x 115 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books is carefully levelled to match childrens growing...



#### Adobe Photoshop 7.0 - Design Professional

Book Condition: Brand New. Book Condition: Brand New.



Dog Poems For Kids Rhyming Books For Children Dog Unicorn Jerks 2 in 1 Compilation Of Volume 1 3 Just Really Big Jerks Series

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 96 pages. Dimensions: 9.0in. x 6.0in. x 0.2in.LIMITED-TIME SPECIAL: Special Bonus Inside! Thats right. . . For a limited time you can download a FREE audiobook version...