



Implications of Ultrahigh Energy Air Showers for Physics and Astrophysics

By F. W. Stecker

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 32 pages. Dimensions: 9.7in. x 7.4in. x 0.1in. The primary ultrahigh energy particles which produce giant extensive air showers in the Earth atmosphere present an intriguing mystery from two points of view: (1) How are the base particles produced with such astounding energies, eight orders of magnitude higher than those produced by the best man-made terrestrial accelerators (2) Since they are most likely extragalactic in origin, how do they reach us from extragalactic distances without suffering the severe losses expected from interactions with the 2.7 K thermal cosmic background photons, the so called GZK effect The answers to these questions may involve new physics: violations of special relativity, grand unification theories, and quantum gravity theories involving large extra dimensions. They may involve new astrophysical sources, zevatrons. Or some heretofore totally unknown physics or astrophysics may hold the answer. I will discuss here the mysteries involving the production and extragalactic propagation of ultrahigh energy cosmic rays and some suggested possible solutions. This item ships from La Vergne, TN. Paperback.



READ ONLINE
[5.87 MB]

Reviews

A top quality publication along with the font used was intriguing to read. I really could comprehend everything using this written e ebook. Its been designed in an remarkably straightforward way and it is only after i finished reading through this publication by which basically altered me, modify the way i believe.

-- **Cathrine Larkin Sr.**

Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book.

-- **Mark Bernier**