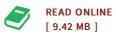




## Nonlinear Cosmic Ray Diffusion Theories

By Andreas Shalchi

Springer-Verlag Gmbh Jun 2009, 2009. Buch. Book Condition: Neu. 235x155x16 mm. Neuware - If charged particles move through the interplanetary or interstellar medium, they interact with a large-scale magnetic eld such as the magnetic eld of the Sun or the Galactic magnetic eld. As these background elds are usually nearly constant in time and space, they can be approximated by a homogeneous eld. If there are no additional elds, the particle trajectory is a perfect helix along which the par- cle moves at a constant speed. In reality, however, there are turbulent electric and magnetic elds dueto the interstellaror solar wind plasma. These elds lead to sc- tering of the cosmic rays parallel and perpendicular to the background eld. These scattering effects, which usually are of diffusive nature, can be described by s- tial diffusion coef cients or, alternatively, by mean free paths. The knowledge of these parameters is essential for describing cosmic ray propagation as well as d- fusive shock acceleration. The latter process is responsible for the high cosmic ray energies that have been observed. The layout of this book is as follows. In Chap. 1, the general physical scenario is presented. We discuss fundamental processes such as...



## Reviews

 $Absolutely\ essential\ study\ book.\ It\ normally\ fails\ to\ price\ excessive.\ I\ realized\ this\ ebook\ from\ my\ dad\ and\ i\ encouraged\ this\ publication\ to\ find\ out.$ 

-- Mariela Stroman

These sorts of pdf is the greatest publication readily available. It can be rally intriguing throgh looking at time. You can expect to like how the blogger publish this book.

-- Prof. Eric Kuvalis II