Theory and Applications of the Poincaré Group (Fundamental Theories of Physics)

By Young Suh Kim, M. Noz

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz

Special relativity and quantum mechanics, formulated early in the twentieth century, are the two most important scientific languages and are likely to remain so for many years to come. In the 1920's, when quantum mechanics was developed, the most pressing theoretical problem was how to make it consistent with special relativity. In the 1980's, this is still the most pressing problem. The only difference is that the situation is more urgent now than before, because of the significant quantity of experimental data which need to be explained in terms of both quantum mechanics and special relativity. In unifying the concepts and algorithms of quantum mechanics and special relativity, it is important to realize that the underlying scientific language for both disciplines is that of group theory. The role of group theory in quantum mechanics is well known. The same is true for special relativity. Therefore, the most effective approach to the problem of unifying these two important theories is to develop a group theory which can accommodate both special relativity and quantum mechanics. As is well known, Eugene P. Wigner is one of the pioneers in developing group theoretical approaches to relativistic quantum mechanics. His 1939 paper on the inhomogeneous Lorentz group laid the foundation for this important research line. It is generally agreed that this paper was somewhat ahead of its time in 1939, and that contemporary physicists must continue to make real efforts to appreciate fully the content of this classic work.

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics)

By Young Suh Kim, M. Noz

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz

Special relativity and quantum mechanics, formulated early in the twentieth century, are the two most important scientific languages and are likely to remain so for many years to come. In the 1920's, when quantum mechanics was developed, the most pressing theoretical problem was how to make it consistent with special relativity. In the 1980's, this is still the most pressing problem. The only difference is that the situation is more urgent now than before, because of the significant quantity of experimental data which need to be explained in terms of both quantum mechanics and special relativity. In unifying the concepts and algorithms of quantum mechanics and special relativity, it is important to realize that the underlying scientific language for both disciplines is that of group theory. The role of group theory in quantum mechanics is well known. The same is true for special relativity. Therefore, the most effective approach to the problem of unifying these two important theories is to develop a group theory which can accommodate both special relativity and quantum mechanics. As is well known, Eugene P. Wigner is one of the pioneers in developing group theoretical approaches to relativistic quantum mechanics. His 1939 paper on the inhomogeneous Lorentz group laid the foundation for this important research line. It is generally agreed that this paper was somewhat ahead of its time in 1939, and that contemporary physicists must continue to make real efforts to appreciate fully the content of this classic work.

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz Bibliography

Download and Read Free Online Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz

Editorial Review

Users Review

From reader reviews:

Nathaniel Gonzalez:

Here thing why that Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) are different and trustworthy to be yours. First of all reading a book is good however it depends in the content of computer which is the content is as scrumptious as food or not. Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) giving you information deeper and in different ways, you can find any publication out there but there is no e-book that similar with Theory and Applications of the Poincaré Group (Fundamental Theories of Physics). It gives you thrill reading through journey, its open up your own personal eyes about the thing that happened in the world which is perhaps can be happened around you. It is possible to bring everywhere like in park, café, or even in your means home by train. If you are having difficulties in bringing the published book maybe the form of Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) in e-book can be your option.

Betty Borgen:

Information is provisions for individuals to get better life, information these days can get by anyone from everywhere. The information can be a information or any news even a huge concern. What people must be consider whenever those information which is inside the former life are difficult to be find than now's taking seriously which one would work to believe or which one often the resource are convinced. If you obtain the unstable resource then you have it as your main information there will be huge disadvantage for you. All those possibilities will not happen inside you if you take Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) as the daily resource information.

Susan Jun:

Playing with family within a park, coming to see the marine world or hanging out with pals is thing that usually you might have done when you have spare time, subsequently why you don't try issue that really opposite from that. 1 activity that make you not sense tired but still relaxing, trilling like on roller coaster you have been ride on and with addition of information. Even you love Theory and Applications of the Poincaré Group (Fundamental Theories of Physics), you could enjoy both. It is excellent combination right, you still wish to miss it? What kind of hang type is it? Oh can happen its mind hangout men. What? Still don't buy it, oh come on its identified as reading friends.

Gloria Lafreniere:

Don't be worry for anyone who is afraid that this book can filled the space in your house, you might have it in e-book way, more simple and reachable. This Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) can give you a lot of good friends because by you considering this one book you have point that they don't and make an individual more like an interesting person. That book can be one of one step for you to get success. This publication offer you information that possibly your friend doesn't know, by knowing more than other make you to be great individuals. So , why hesitate? We should have Theory and Applications of the Poincaré Group (Fundamental Theories of Physics).

Download and Read Online Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz #8U9SCV4W72L

Read Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz for online ebook

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz books to read online.

Online Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz ebook PDF download

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz Doc

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz Mobipocket

Theory and Applications of the Poincaré Group (Fundamental Theories of Physics) By Young Suh Kim, M. Noz EPub