

[DOWNLOAD](#)

Scattering Amplitudes in Gauge Theories

By Johannes M. Henn

Springer Feb 2014, 2014. Taschenbuch. Book Condition: Neu. 235x155x11 mm. This item is printed on demand - Print on Demand Neuware - At the fundamental level, the interactions of elementary particles are described by quantum gauge field theory. The quantitative implications of these interactions are captured by scattering amplitudes, traditionally computed using Feynman diagrams. In the past decade tremendous progress has been made in our understanding of and computational abilities with regard to scattering amplitudes in gauge theories, going beyond the traditional textbook approach. These advances build upon on-shell methods that focus on the analytic structure of the amplitudes, as well as on their recently discovered hidden symmetries. In fact, when expressed in suitable variables the amplitudes are much simpler than anticipated and hidden patterns emerge. These modern methods are of increasing importance in phenomenological applications arising from the need for high-precision predictions for the experiments carried out at the Large Hadron Collider, as well as in foundational mathematical physics studies on the S-matrix in quantum field theory. Bridging the gap between introductory courses on quantum field theory and state-of-the-art research, these concise yet self-contained and course-tested lecture notes are well-suited for a one-semester graduate level course or as a...



[READ ONLINE](#)
[6.24 MB]

Reviews

Extensive guide! Its such a excellent read. This can be for anyone who statte that there was not a worth looking at. I am just effortlessly will get a satisfaction of looking at a written publication.

-- **Melvin Hettinger**

This book will not be effortless to start on reading through but very exciting to learn. It is amongst the most remarkable book i have got go through. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Dr. Easton Collier DVM**