

---

## PREFACE TO THE SECOND EDITION

---

It is to my surprise that the basis of quantum chromodynamics (QCD) has been made firmer and firmer in its applicability in the perturbative as well as nonperturbative regime since the first edition of this book was prepared in 1986. While much theoretical progress has been made in perturbative QCD, the basic structure of its formulation has remained unchanged and so the book is still of value for researchers who wish to learn fundamental items of perturbative QCD.

In preparing the second edition, I thoroughly inspected the book to make corrections of misprints as many as possible. Two graduate students, Kazutaka Kawakami and Norikazu Yamada, were of great help in this tiring and time-consuming work. I would like to thank them for their beautiful work. In the second edition, some new sentences are added corresponding to the new developments in theoretical and experimental studies of QCD. Advices given to the author by Takashi Ohsugi, Yoshio Sumi and Reisaburo Tanaka have been very useful in the process of renewing the book. The appendix D is added for the convenience of the readers who are not used to employing the Feynman rule in our book but accustomed to the traditional Feynman rule which appears in many books.

T. Muta

*Hiroshima, Japan*  
*March 1997*