



Introduction to Quantum Fields on a Lattice (Paperback)

By Jan Smit

CAMBRIDGE UNIVERSITY PRESS, United Kingdom, 2005. Paperback. Condition: New. Language: English . Brand New Book ****** Print on Demand ******. This book provides a concrete introduction to quantum fields on a lattice: a precise and non-perturbative definition of quantum field theory obtained by replacing continuous space-time by a discrete set of points on a lattice. The path integral on the lattice is explained in concrete examples using weak and strong coupling expansions. Fundamental concepts such as triviality of Higgs fields and confinement of quarks and gluons into hadrons are described and illustrated with the results of numerical simulations. The book also provides an introduction to chiral symmetry and chiral gauge theory, as well as quantized non-abelian gauge fields, scaling and universality. Based on the lecture notes of a course given by the author, this book contains many explanatory examples and exercises, and is suitable as a textbook for advanced undergraduate and graduate courses.



Reviews

An extremely great ebook with perfect and lucid answers. This is certainly for anyone who statte that there was not a well worth looking at. Its been designed in an exceptionally simple way and is particularly only soon after i finished reading through this ebook in which actually transformed me, modify the way in my opinion.

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