Introduction to the theory of quantized fields

Start by marking “Introduction to the Theory of Quantized Fields” as Want to Read: Want to Read saving… Want to Read. Currently Reading, Read. Introduction to the Th by D.V. Shirkov. Other editions. The quantum theory that one nds agrees with the usual picture of canonical quantization that one learns in standard eld theory. The quantum theory also comes with a representation of the inhomogeneous Lorentz group (the Poincar´e group) that arises from an analytic continuation of the quantization of the Euclidean group. Thus the two fundamental points of view mesh to one. We rst investigate a special case that relates to the Gaussian path integral and the free quantum eld. We then give the general construction that applies for bosonic non-linear elds. Introduction to Quantum Field Theory. 24

In this chapter we give a dierent perspective on the ordinary quantum theory of a single spinless, positive msss-m particle on Rd−1. In this edition we have rewritten the chapters that discuss the methods of continuous integration and the renormalization group, which are two topics in theory that have become extremely important in recent years. We have also reworked and supplemented the sections on the complete Green functions. This work was done in an atmosphere of friendly advice and fruitful discussions with our colleagues from the Steklov Mathematical Institute of the USSR Academy of Sciences and of the Laboratory of Theoretical Physics of the Joint Institute of Nuclear Studies, to whom we are extremely grateful.