

A SHORT COURSE ON QUANTUM FIELD THEORY

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Interactions Fondamentales

AGO Department

Goal: understand

Feynman diagrams and be
able to calculate elementary
cross sections

REFERENCES

M.E. PESKIN - D.V. SCHROEDER : "An introduction to quantum field theory", Second edition, Perseus Books

C. ITZYKSON - J.B. ZUBER, "QUANTUM FIELD THEORY", Mc Graw-Hill

F. MANDL - G. SHAW, "QUANTUM FIELD THEORY", JOHN WILEY & SONS

N.N. BOGOLYUBOV. D.V. SHIRKOV, "INTRODUCTION TO THE THEORY OF QUANTIZED FIELDS", INTERSCIENCE, 1959.

S.S. SCHWEBER, "AN INTRODUCTION TO RELATIVISTIC QUANTUM FIELD THEORY", DOVER PUBLICATIONS.

P.A.M. DIRAC, "LECTURES ON QUANTUM FIELD THEORY", BELFER GRAD. SCHOOL OF SCIENCE, NEW YORK, 1966

VOJA RADOVANOVIC, "PROBLEM BOOK QUANTUM FIELD THEORY", SPRINGER 2006

J. COSTELLA ET AL, "CLASSICAL ANTI PARTICLES", hep-ph/9704210

- 1 - Classical electrodynamics
- 2 - Relativistic wave equations
- 3 - Second quantization
- 4 - Free fields
- 5 - Interacting fields
- 6 - Elementary QED processes