

QFT

Chapter 62: Loop Corrections in Spinor Electrodynamics

Overview

- Nothing is really new here, this is all the same game as before: draw diagrams with loops, assess their values, absorb the divergences into the renormalization factors.
- One thing to note is R_ξ gauge, a general gauge that reflects our freedom to add terms of the form $k_\mu k_\nu / k^2$, since these terms are transverse to the field, see 59.15.
- Also, recall symmetric integration, which we worked out in problem 14.3. This allows us to simplify some messy integrals.