

QFT

Chapter 47: Gamma Matrix Technology

Everything

- Here Srednicki derives a few useful identities for gamma matrices.
- I have very little to add to this. Some random thoughts:
 - Traces are cyclic, $\text{Tr}(ABC) = \text{Tr}(BCA) = \text{Tr}(CAB)$
 - Gamma matrices are Hermitian (γ^0) or anti-Hermitian (γ^i)
 - Recall our slash notation: $\not{a} = a_\mu \gamma^\mu$
- With these results, we will be able to simplify the matrix elements even further than we did in chapter 46.