

Spinor Sorcery

Pre-Lecture Reading/Post-Lecture Summary

We will finalize the Feynman rules for QED and start to construct an example calculation of the amplitude M . We will immediately face the hurdle of imposing the average over incoming spin states and sum over outgoing spin states. To facilitate this, we will have to grab our magic spinor wand and wave it over our expression, transforming it into more approachable terms. After a bit of this trickery, we will face the almighty trace expressions of the gamma matrices (of he who's name we seem so often to speak). Relying on several results that you proved in an earlier homework, we will evaluate these trace expressions and render the expression down to a plain old fashioned number that we can shove right up the of Fermi's Golden Rule. Then you will leave and be happy.