

Questions (meeting 3)

1. Do the ideas of effective field theory change your perspective on the Fermi four-point interaction?
2. What is the dimension of $j^\mu j_\mu$? Of $j^\mu W_\mu$?
3. Could you add $\bar{\psi} \sigma_{\mu\nu} T^A \psi F^{\mu\nu}_A$ to the lagrangian? Is it gauge invariant? Renormalizable?
4. How would you add a scalar field to the gauge theory?
5. For gauge group SU(3), how many gauge bosons are there? How many components to the fermion field?