

Questions (meeting 7)

The real thing (at last).

This is a “chiral theory.”

1. At the stage of Eq. 4.24, are g and g' arbitrary?
2. What vertices are contained in Eq. 4.68?
3. After the choice of gauge group and matter irreps, the parameters of the Lagrangian are g , g' , μ , λ , and G_e . What physical measurements are needed to determine them? Have they all been determined?
4. Could Eq. 4.33 be written if the scalar hypercharge were changed?
5. What would happen to the theory if one changed the hypercharge of the right handed electron without changing any other representations?