

Additional Exercises for Chapter 2

- Calculate the D-term contribution, δ_f , to the squark or slepton mass squared matrix for a sfermion with diagonal $SU(2)_L$ charge T_f^3 and electric charge Q_f .
- Taking the couplings $\alpha_2 = 0.0322$ and $\alpha_3 = 0.0895$ (renormalized at 1 TeV) use one-loop running to estimate the MSSM unification scale and the value of the unified coupling at that scale.