

14.6 The beta-function of the Higgs self-coupling.

Draw the Feynman diagrams (at least one per term) corresponding to the beta-function for the Higgs self-coupling λ ,

$$\frac{d\lambda}{dt} = \frac{1}{16\pi^2} \left\{ 12\lambda^2 + 12\lambda y_t^2 - 12y_t^4 - \frac{3}{2}\lambda(3g^2 + g'^2) + \frac{3}{16} [2g^4 + (g^2 + g'^2)^2] \right\}.$$

(Hint: In general, self-energy insertions into the external lines contribute.)

