$$g_{3} \rightarrow g_{3} + \hbar \left(\frac{1}{2} g_{3}^{3} - g_{3}^{3} LF_{3,-1}[m_{3}] - \frac{1}{4} \sum_{p} g_{3}^{3} LF_{2,0}[m_{d}^{-p}] + \frac{1}{6} \sum_{p} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] - \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] + \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] - \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] + \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] - \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] + \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] - \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] + \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] - \frac{1}{2} \sum_{q} g_{3}^{3} LF_{3,-1}[m_{d}^{-p}] + \frac{1}{2} \sum_{q} g_{3}^{2} LF_{3,-1}[m_{d}^{-p}] + \frac{1}{2}$$

 $-\frac{1}{2} \sum_{p} g_{3}{}^{3} \ \mathsf{LF}_{2,\,0} \left[\mathsf{m}_{\tilde{q}}{}^{p} \right] \ + \frac{1}{3} \sum_{p} g_{3}{}^{3} \ \mathsf{LF}_{3,\,-1} \left[\mathsf{m}_{\tilde{q}}{}^{p} \right] \ - \frac{1}{4} \sum_{p} g_{3}{}^{3} \ \mathsf{LF}_{2,\,0} \left[\mathsf{m}_{\tilde{u}}{}^{p} \right] \ + \frac{1}{6} \sum_{p} g_{3}{}^{3} \ \mathsf{LF}_{3,\,-1} \left[\mathsf{m}_{\tilde{u}}{}^{p} \right] \right)$