Total Amplitude 1 Loop

$M_{R1} (M_B)^\dagger + M_B (M_{R1})^\dagger + M_{R2} (M_B)^\dagger + M_B (M_{R2})^\dagger + M_{\Sigma 1} (M_B)^\dagger + M_B (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_B)^\dagger + M_B (M_{\Sigma 2})^\dagger +$

$M_V (M_B)^\dagger + M_B (M_V)^\dagger + M_B (M_B)^\dagger + M_{R2} (M_{R1})^\dagger + M_{R1} (M_{R2})^\dagger + M_{\Sigma 1} (M_{R1})^\dagger + M_{R1} (M_{\Sigma 1})^\dagger +$

$M_{\Sigma 2} (M_{R1})^\dagger + M_{R1} (M_{\Sigma 2})^\dagger + M_V (M_{R1})^\dagger + M_{R1} (M_V)^\dagger + M_{R1} (M_{R1})^\dagger + M_{\Sigma 1} (M_{R2})^\dagger + M_{R2} (M_{\Sigma 1})^\dagger +$

$M_{\Sigma 2} (M_{R2})^\dagger + M_{R2} (M_{\Sigma 2})^\dagger + M_V (M_{R2})^\dagger + M_{R2} (M_V)^\dagger + M_{R2} (M_{R2})^\dagger + M_{\Sigma 2} (M_{\Sigma 1})^\dagger + M_{\Sigma 1} (M_{\Sigma 2})^\dagger +$

$M_{\Sigma 1} (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_{\Sigma 2})^\dagger + M_{\Sigma 1} (M_V)^\dagger + M_V (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_V)^\dagger + M_V (M_{\Sigma 2})^\dagger + M_V (M_V)^\dagger$

Higher Order Contributions

Order $\alpha_s{}^2$

$M_{\Sigma 2} (M_{\Sigma 1})^\dagger + M_{\Sigma 1} (M_{\Sigma 2})^\dagger + M_{\Sigma 1} (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_{\Sigma 2})^\dagger +$

$M_{\Sigma 1} (M_V)^\dagger + M_V (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_V)^\dagger + M_V (M_{\Sigma 2})^\dagger + M_V (M_V)^\dagger$

Order $g_s{}^3$

$M_{\Sigma 1} (M_{R1})^\dagger + M_{R1} (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_{R1})^\dagger + M_{R1} (M_{\Sigma 2})^\dagger + M_V (M_{R1})^\dagger + M_{R1} (M_V)^\dagger$

$+ M_{\Sigma 1} (M_{R2})^\dagger + M_{R2} (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_{R2})^\dagger + M_{R2} (M_{\Sigma 2})^\dagger + M_V (M_{R2})^\dagger + M_{R2} (M_V)^\dagger$

Trace 0 (Odd)

$M_{R1} (M_B)^\dagger + M_B (M_{R1})^\dagger + M_{R2} (M_B)^\dagger + M_B (M_{R2})^\dagger$

Total Usable Contributions

Born

$M_B (M_B)^\dagger$

Virtual

$M_V (M_B)^\dagger + M_B (M_V)^\dagger$

Self Energy

$M_{\Sigma 1} (M_B)^\dagger + M_B (M_{\Sigma 1})^\dagger + M_{\Sigma 2} (M_B)^\dagger + M_B (M_{\Sigma 2})^\dagger$

Real Emissions

$M_{R2} (M_{R1})^\dagger + M_{R1} (M_{R2})^\dagger + M_{R1} (M_{R1})^\dagger + M_{R2} (M_{R2})^\dagger$