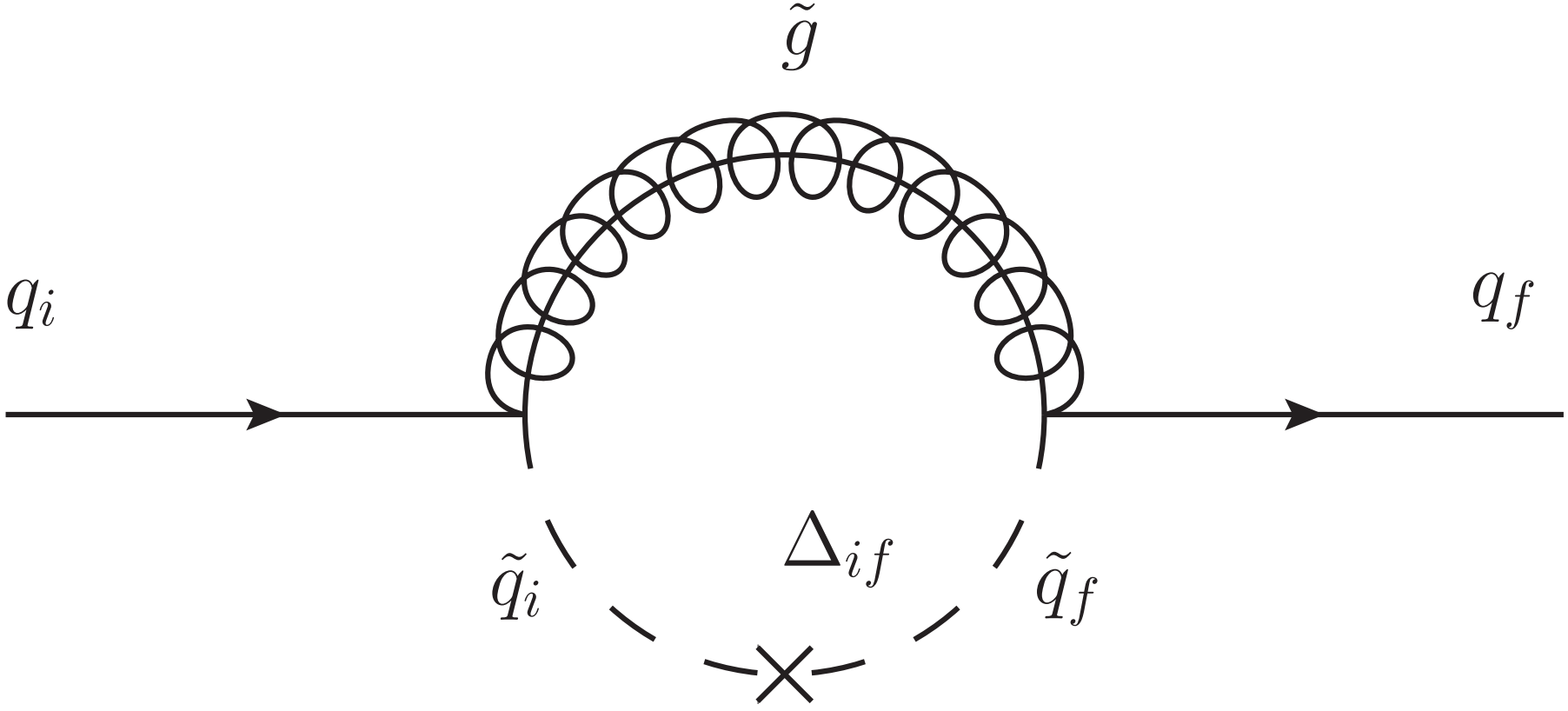
$\tilde{g}$
q_i
q_f
$\tilde{q}_i$
Δ_{if}
$\tilde{q}_f$