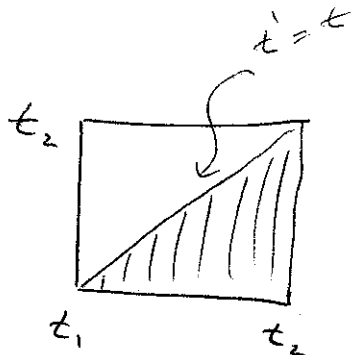
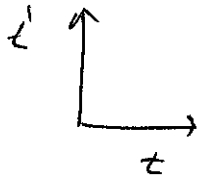


Look @ the second term.

$$\int_{t_1}^{t_2} dt \int_{t_1}^t dt'$$



Nice to write it over the whole region!

$$\int_{\square} \cancel{H_I(t)} H_I(t) H_I(t') = \frac{1}{2} \int_{\square} T(H_I(t) H_I(t'))$$

time ordered product

$$T(A(t) B(t')) = \begin{cases} A(t) B(t') & t > t' \\ B(t') A(t) & t < t' \end{cases}$$