

Custom macros

Ian Mitchell

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Expectation value

$$\begin{aligned} \text{\$}\backslash\text{expval}\{a\}\text{\$} &\rightarrow \langle a \rangle \\ \text{\$\$}\backslash\text{expval}\{\diff{f}{t}\}\text{\$\$} & \\ &\rightarrow \left\langle \frac{df}{dt} \right\rangle \end{aligned}$$

Commutation

Commutator

$$\text{\$}\backslash\text{comm}\{\op{x}\}\{\op{p}\} = i\hbar \text{\$} \rightarrow [\hat{x}, \hat{p}] = i\hbar$$

Anticommutator

$$\begin{aligned} \text{\$\$}\backslash\text{acomm}\{\op{c}\{i\}\}\{\hc{c}\{j\}\} = \delta_{\alpha, \beta} \text{\$\$} & \\ \rightarrow \{\hat{c}_i, \hat{c}_j^\dagger\} = \delta_{\alpha, \beta} & \end{aligned}$$

Compact derivatives

$$\begin{aligned} \text{\$\$}\backslash\text{dlp}\{f\}\{t\}\text{\$\$} & \\ \rightarrow \partial_t f & \end{aligned}$$