

$$\Gamma[\mathbf{X}_{i_-, j_-, k_-, l_-}[S_-, T_-]] := \Gamma\left[\{\textcolor{teal}{L}, \textcolor{violet}{i}\}, \{\textcolor{teal}{j}, \textcolor{violet}{k}\}, \langle|\xi_i \rightarrow S, x_j \rightarrow T, x_k \rightarrow S, \xi_L \rightarrow T|\rangle, \right.$$

$$\left. T^{-1/2}, \mathsf{CF}\left[\{\xi_L, \xi_i\} \cdot \begin{pmatrix} 1 & 1 - \textcolor{teal}{T} \\ 0 & T \end{pmatrix} \cdot \{x_j, x_k\} \right] \right];$$

$$\Gamma[\overline{\mathbf{X}}_{i_-, j_-, k_-, l_-}[S_-, T_-]] := \Gamma\left[\{\textcolor{violet}{i}, \textcolor{teal}{j}\}, \{\textcolor{violet}{k}, \textcolor{teal}{l}\}, \langle|\xi_i \rightarrow S, \xi_j \rightarrow T, x_k \rightarrow S, x_l \rightarrow T|\rangle, \right.$$

$$\left. T^{1/2}, \mathsf{CF}\left[\{\xi_i, \xi_j\} \cdot \begin{pmatrix} \textcolor{teal}{T}^{-1} & 0 \\ 1 - \textcolor{teal}{T}^{-1} & 1 \end{pmatrix} \cdot \{x_k, x_l\} \right] \right];$$

$$\Gamma[\mathbf{X}_{i_-, j_-, k_-, l_-}] := \Gamma[\mathbf{X}_{i, j, k, l}[\tau_i, \tau_l]]; \quad$$

$$\Gamma[\overline{\mathbf{X}}_{i_-, j_-, k_-, l_-}] := \Gamma[\overline{\mathbf{X}}_{i, j, k, l}[\tau_i, \tau_j]]; \quad$$