

$$\text{yak} = \frac{1}{2(1 + \hbar t_2 \gamma_{21})}$$

$$\frac{\hbar X_{\$183} \left( Y_{\$179} \left( \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) - \hbar t_2 \gamma_{11} \right) \gamma_{22} \right) - \hbar t_2 \gamma_3 \gamma_{22} \gamma_{31} + e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) \left( Y_{\$179} \left( \gamma_{11} + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{21} \right) + \gamma_3 \gamma_{31} \right) + \gamma_3 (1 + \hbar t_2 \gamma_{21}) \gamma_{32} \right)}{e^{1 + \hbar t_2 \gamma_{21}}}$$

$$\hbar^2 (X_{\$183} \gamma_{22} + X_3 \gamma_{23}) (Y_{\$179} \gamma_{11} + Y_3 \gamma_{31})$$

$$\left( 4 e^{\frac{\hbar X_{\$183} \left( Y_{\$179} \left( \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) - \hbar t_2 \gamma_{11} \right) \gamma_{22} \right) - \hbar t_2 \gamma_3 \gamma_{22} \gamma_{31} + e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) \left( Y_{\$179} \left( \gamma_{11} + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{21} \right) + \gamma_3 \gamma_{31} \right) + \gamma_3 (1 + \hbar t_2 \gamma_{21}) \gamma_{32} \right)}{1 + \hbar t_2 \gamma_{21}}} \right)$$

$$a_{\$182} + \gamma \hbar \left( -X_3 \gamma_{23} \left( Y_{\$179} \left( 2 \right. \right. \right.$$

$$\left. \left. \left. \frac{\hbar \left( X_{\$183} \left( Y_{\$179} \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{12} + \lambda_{21} + \lambda_{22}) + t_3 (\lambda_{31} + \lambda_{32}) \right) \gamma_{21} + \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{22} + \gamma_{11} \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) - \hbar t_2 \gamma_{22} \right) \right) + \gamma_3 \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) - \hbar t_2 \gamma_{22} \right) \right)}{1 + \hbar t_2 \gamma_{21}} \right) \right) \right)$$

$$- \frac{\hbar X_{\$183} \left( Y_{\$179} \left( \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) - \hbar t_2 \gamma_{11} \right) \gamma_{22} \right) - \hbar t_2 \gamma_3 \gamma_{22} \gamma_{31} + e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) \left( Y_{\$179} \left( \gamma_{11} + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{21} \right) + \gamma_3 \gamma_{31} \right) + \gamma_3 (1 + \hbar t_2 \gamma_{21}) \gamma_{32} \right)}{e^{1 + \hbar t_2 \gamma_{21}}}$$

$$\left. \left. \left. \hbar t_2 \gamma_{11} \right) \right) \right) -$$

$$\frac{\hbar X_{\$183} \left( Y_{\$179} \left( \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) - \hbar t_2 \gamma_{11} \right) \gamma_{22} \right) - \hbar t_2 \gamma_3 \gamma_{22} \gamma_{31} + e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) \left( Y_{\$179} \left( \gamma_{11} + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{21} \right) + \gamma_3 \gamma_{31} \right) + \gamma_3 (1 + \hbar t_2 \gamma_{21}) \gamma_{32} \right)}{e^{1 + \hbar t_2 \gamma_{21}}}$$

$$\left. \left. \left. \hbar t_2 \gamma_3 \gamma_{31} \right) + X_{\$183} \left( Y_{\$179} \left( -2 \right. \right. \right.$$

$$\left. \left. \left. \frac{\hbar \left( X_{\$183} \left( Y_{\$179} \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{12} + \lambda_{21} + \lambda_{22}) + t_3 (\lambda_{31} + \lambda_{32}) \right) \gamma_{21} + \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{22} + \gamma_{11} \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) - \hbar t_2 \gamma_{22} \right) \right) + \gamma_3 \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) - \hbar t_2 \gamma_{22} \right) \right)}{1 + \hbar t_2 \gamma_{21}} \right) \right) \right)$$

$$\left. \left. \left. \gamma_{22} + \gamma_{11} \right) \right) \right) - 2$$

$$\frac{\hbar \left( X_{\$183} \left( Y_{\$179} \left( \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) - \hbar t_2 \gamma_{11} \right) \gamma_{22} \right) - \hbar t_2 \gamma_3 \gamma_{22} \gamma_{31} + e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) \left( Y_{\$179} \left( \gamma_{11} + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{21} \right) + \gamma_3 \gamma_{31} \right) + \gamma_3 (1 + \hbar t_2 \gamma_{21}) \gamma_{32} \right)}{e^{1 + \hbar t_2 \gamma_{21}}}$$

$$+ \frac{\hbar X_{\$183} \left( Y_{\$179} \left( \gamma_{12} (1 + \hbar t_2 \gamma_{21}) + \left( e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) - \hbar t_2 \gamma_{11} \right) \gamma_{22} \right) - \hbar t_2 \gamma_3 \gamma_{22} \gamma_{31} + e^{-\gamma \hbar} \left( t_2 (\lambda_{12} + \lambda_{22}) + t_3 \lambda_{32} \right) \left( Y_{\$179} \left( \gamma_{11} + e^{-\gamma \hbar} \left( t_2 (\lambda_{11} + \lambda_{21}) + t_3 \lambda_{31} \right) \gamma_{21} \right) + \gamma_3 \gamma_{31} \right) + \gamma_3 (1 + \hbar t_2 \gamma_{21}) \gamma_{32} \right)}{e^{1 + \hbar t_2 \gamma_{21}}}$$

$$\left. \left. \left. \hbar t_2 \gamma_{22} \right) \right) \right) - \gamma_3 \left( 2 \right.$$

