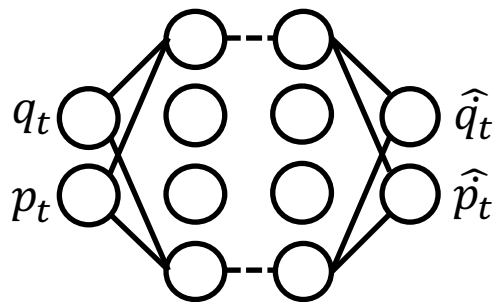
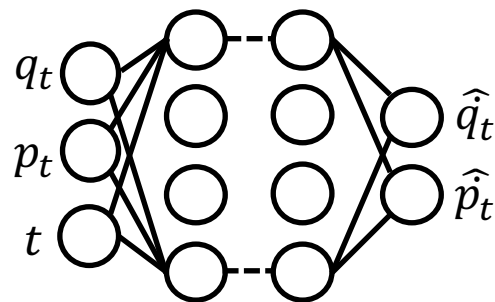


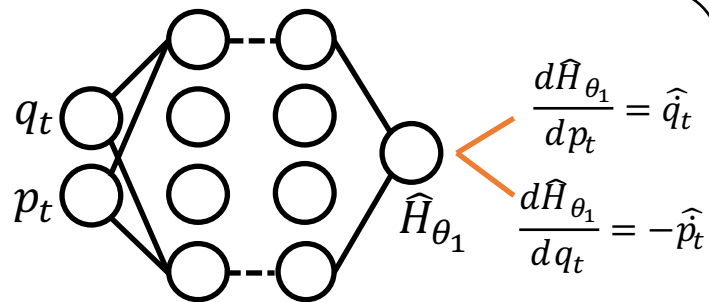
Classic NN



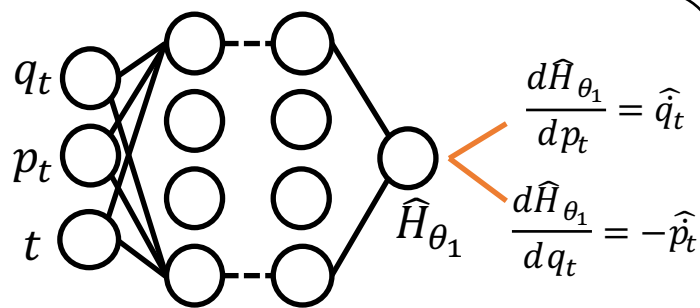
Baseline NN



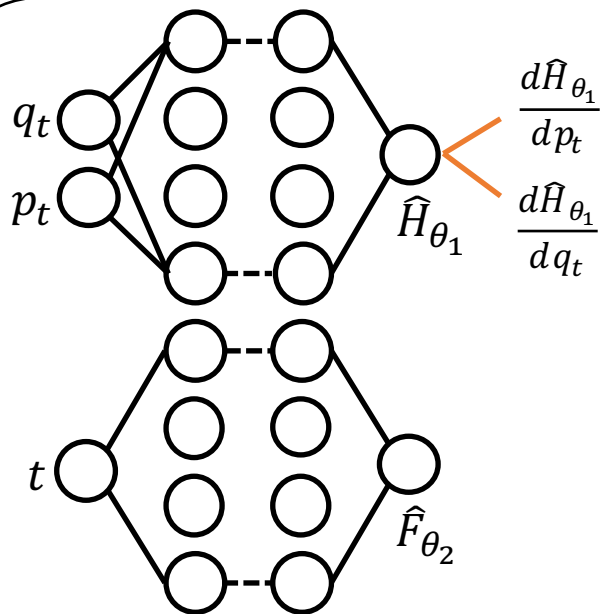
Hamiltonian NN



Time-dependent HNN



Time-dependent HNN 4



$$\begin{bmatrix} \hat{q}_t \\ \hat{p}_t \end{bmatrix} = \begin{bmatrix} \frac{d\hat{H}_{\theta_1}}{dp_t} \\ -\frac{d\hat{H}_{\theta_1}}{dq_t} \end{bmatrix} + \begin{bmatrix} 0 \\ -D_{\theta_3} \frac{d\hat{H}_{\theta_1}}{dp_t} \end{bmatrix} + \begin{bmatrix} 0 \\ \hat{F}_{\theta_2} \end{bmatrix}$$