Forward SDE $\left[\nabla_{\mathbf{x}_t} \log p(\mathbf{x}_T \mid \mathbf{x}_t) \big|_{\mathbf{x}_T = y} \right]$ $d\mathbf{x}_t = \left[\mathbf{f}(\mathbf{x}_t, t) + g^2(t) \mathbf{h}(\mathbf{x}_t, t, y, T)\right] dt + g(t) d\mathbf{w}_t$ $\mathbf{x}_0 \leftarrow d\mathbf{x}_t = \left[\mathbf{f}(\mathbf{x}_t, t) - g^2(t) \left(\frac{1}{2} \mathbf{s}(\mathbf{x}_t, t, y, T) - \mathbf{h}(\mathbf{x}_t, t, y, T) \right) \right] dt \rightarrow \mathbf{x}_T$ $\left[\nabla_{\mathbf{x}_t} \log q(\mathbf{x}_t \mid \mathbf{x}_T) \right]_{\mathbf{x}_T = y}$ Probability Flow ODE