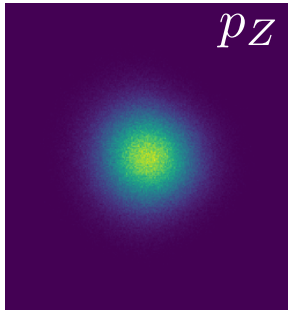
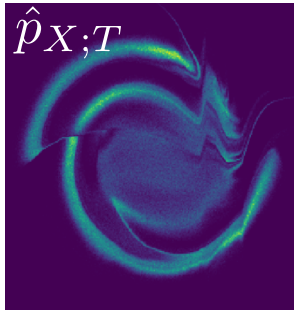
Normalizing Flows



$x = T(z)$



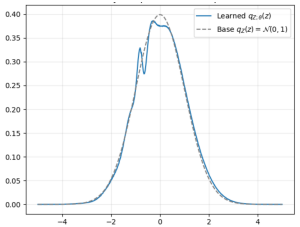
Requires known T^{-1}

Can compute $\hat{p}_X$ for arbitrary x samples

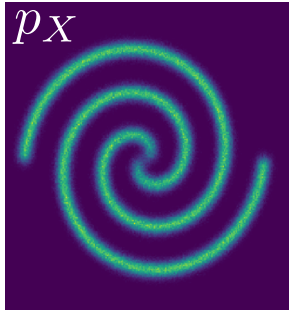
$$\hat{p}_{X;T} = p_Z(T^{-1}(z))|\det J_{T^{-1}}(x)|$$

Reparametrization

$\hat{p}_{Z;T}$



$z = T^{-1}(x)$



Does not require explicit T^{-1}

Force T to be bijective through regularization

$\hat{p}_X$ can only be evaluated when sampling

$$\hat{p}_X(T(z)) = p_Z(z) \cdot |\det J_T(z)|^{-1}$$

$$\hat{p}_{Z;T} = p_X(T(z))|\det J_T(z)|$$