$$f_{\phi(\widehat{\mathbf{x}})}: \mathbb{R}^2 \to \mathbb{R}^2, \ p_{\boldsymbol{x}}(\boldsymbol{x}) \sim \boldsymbol{x} \mapsto \boldsymbol{z} = f_{\phi(\widehat{\mathbf{x}})}(\boldsymbol{x}) \sim \mathcal{N}(0,1)^2$$
Weights of neural networks depending on training data $\widehat{\mathbf{x}}$

Vector \boldsymbol{x} representing points of a 2D standard normal distribution points on the moon shapes