



Training objective: Maximise

$$\text{ELBO}(x, \theta, \phi) = \mathbb{E}_{q_{Z|x}(\cdot, \phi)} [\log(p_{X|z}(x, \theta))] - D_{\text{KL}}(q_{Z|x}(\cdot, \phi) \| p_Z(\cdot, \theta)) \text{ w.r.t both } \theta \text{ and } \phi$$