

$$\boldsymbol{\theta}^{(k+1)} = \arg \max_{\boldsymbol{\theta}} F(q^{(k+1)}, \boldsymbol{\theta}) = \arg \max_{\boldsymbol{\theta}} \mathbb{E}_{q^{(k+1)}(\mathbf{z}|\boldsymbol{\theta}^{(k)})} [\log(p(\mathbf{z}|\boldsymbol{\theta})f(\mathbf{z}))]$$