

Latent-Variable Model

$$p(y) = \int p(x, y) dx$$

Posterior $p(x | y)$

Posterior Approximation

$$\mathcal{S}.q(x) = \int \mathcal{S}.q(r, x) dr$$

Meta-Posterior $\mathcal{S}.q(r | x)$

\mathcal{S}

Meta-Posterior Approximation

$$\mathcal{S}.\mathcal{M}(x).q(r) = \int \mathcal{S}.\mathcal{M}(x).q(s, r) ds$$

$\mathcal{S}.\mathcal{M}$

Meta-Meta-Posterior $\mathcal{S}.\mathcal{M}(x).q(s | r)$

Meta-Meta-Posterior Approximation

$$\mathcal{S}.\mathcal{M}(x).\mathcal{M}(r).q(s)$$

$\mathcal{S}.\mathcal{M}.\mathcal{M}$

\vdots