



$$\mathbf{z}_n \sim \mathcal{N}_k(\mathbf{0}, I)$$

$$\mathbf{x}_n \sim \mathcal{N}_d(\mathbf{z}_n \cdot \boldsymbol{\beta}^T, I)$$

$$\boldsymbol{\beta} \sim \mathcal{N}_{d \times k}(\mathbf{0}, I)$$