

# Mean field

1. Select a family of distributions  $Q$

$$Q = \{q \mid q(z) = \prod_{i=1}^d q_i(z_i)\}$$

2. Find best approximation  $q(z)$  of  $p^*(z)$ :

$$\mathcal{KL}[q(z) \parallel p^*(z)] \rightarrow \min_{q \in Q}$$

