## **E-step summary**

$$\log p(X \mid \theta) - \mathcal{L}(\theta, q) = \sum_{i} \mathcal{KL} \left( q(t_i) \parallel p(t_i \mid x_i, \theta) \right)$$

E-step: 
$$\underset{q(t_i)}{\operatorname{arg\,max}} \mathcal{L}(\theta^k, q) = p(t_i \mid x_i, \theta)$$

$$\log p(X \mid \theta)$$

