

USING THE POSTERIOR

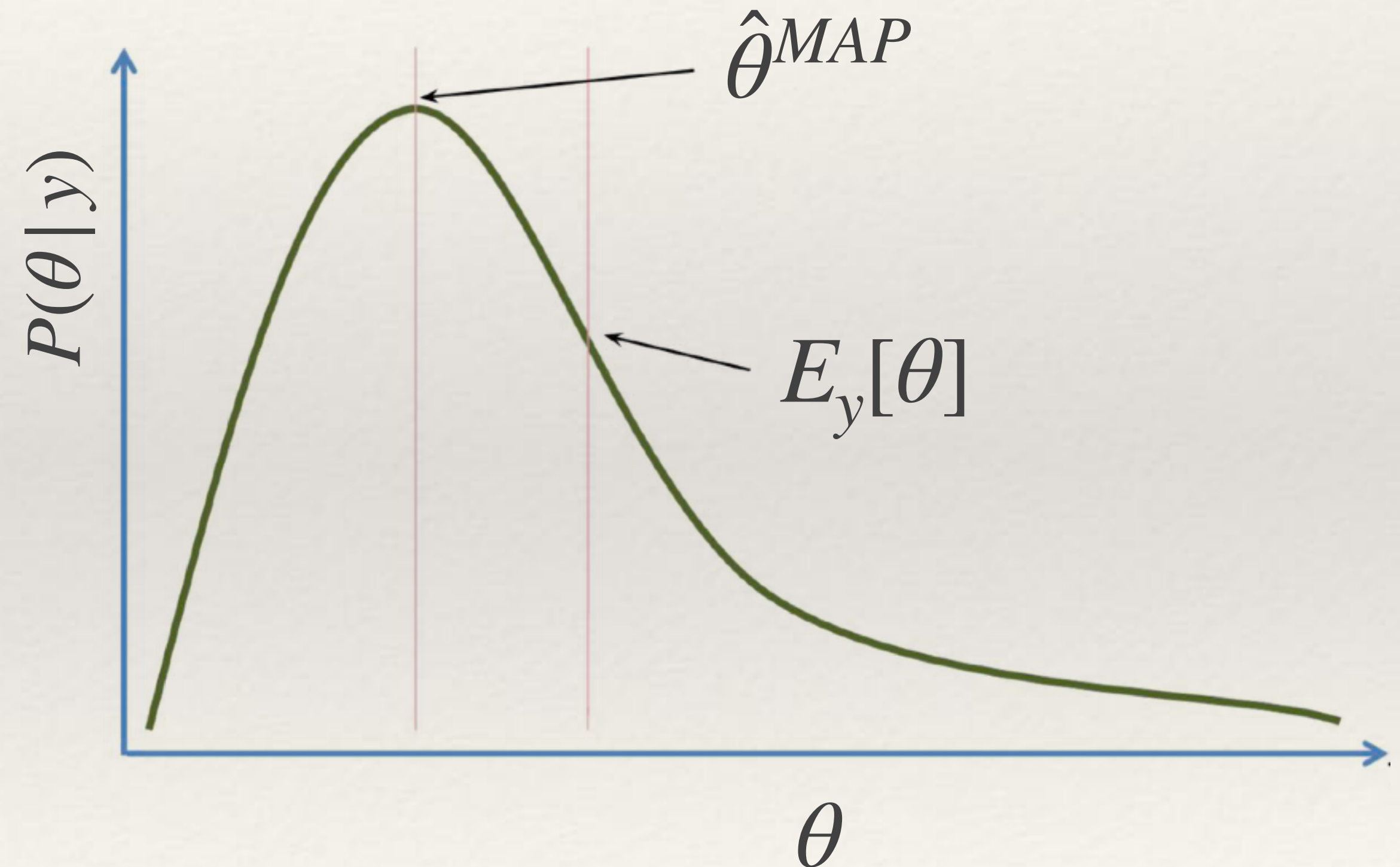
POSTERIOR ESTIMATORS

- Bayesian equivalent to MLE is the **Maximum A Posteriori (MAP)**:

$$\hat{\theta}^{MAP} = \operatorname{argmax}_{\theta \in \Omega} [P(\theta | y)]$$

- The posterior mean is more common:

$$E_y[\theta] = \sum_{\theta \in \Omega} \theta P(\theta | y)$$



(Posterior median is also used occasionally.)