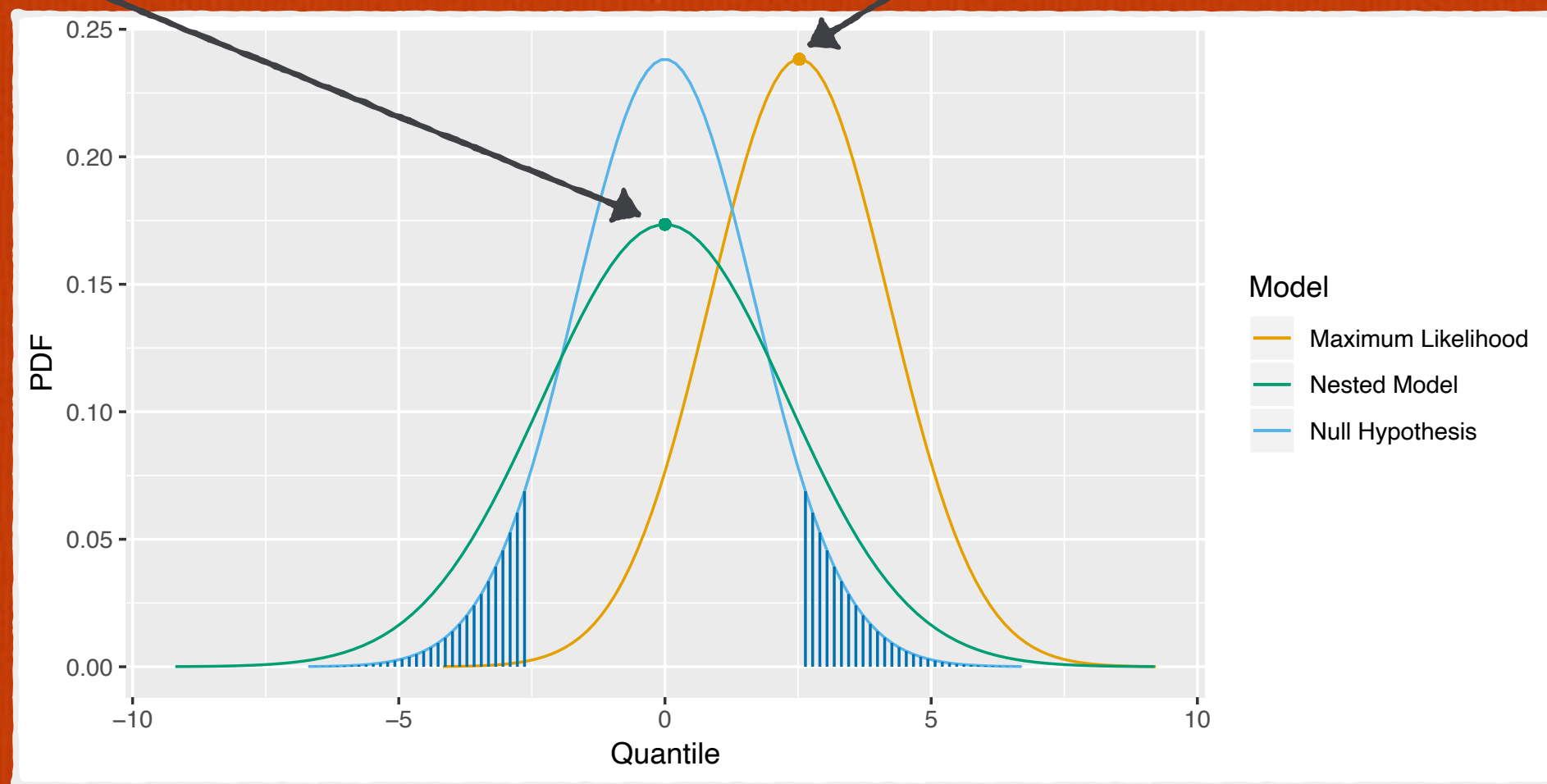


$$\mathcal{L}_0 (\mu_0 = 0, \hat{\sigma}_0^2 = 5.26)$$

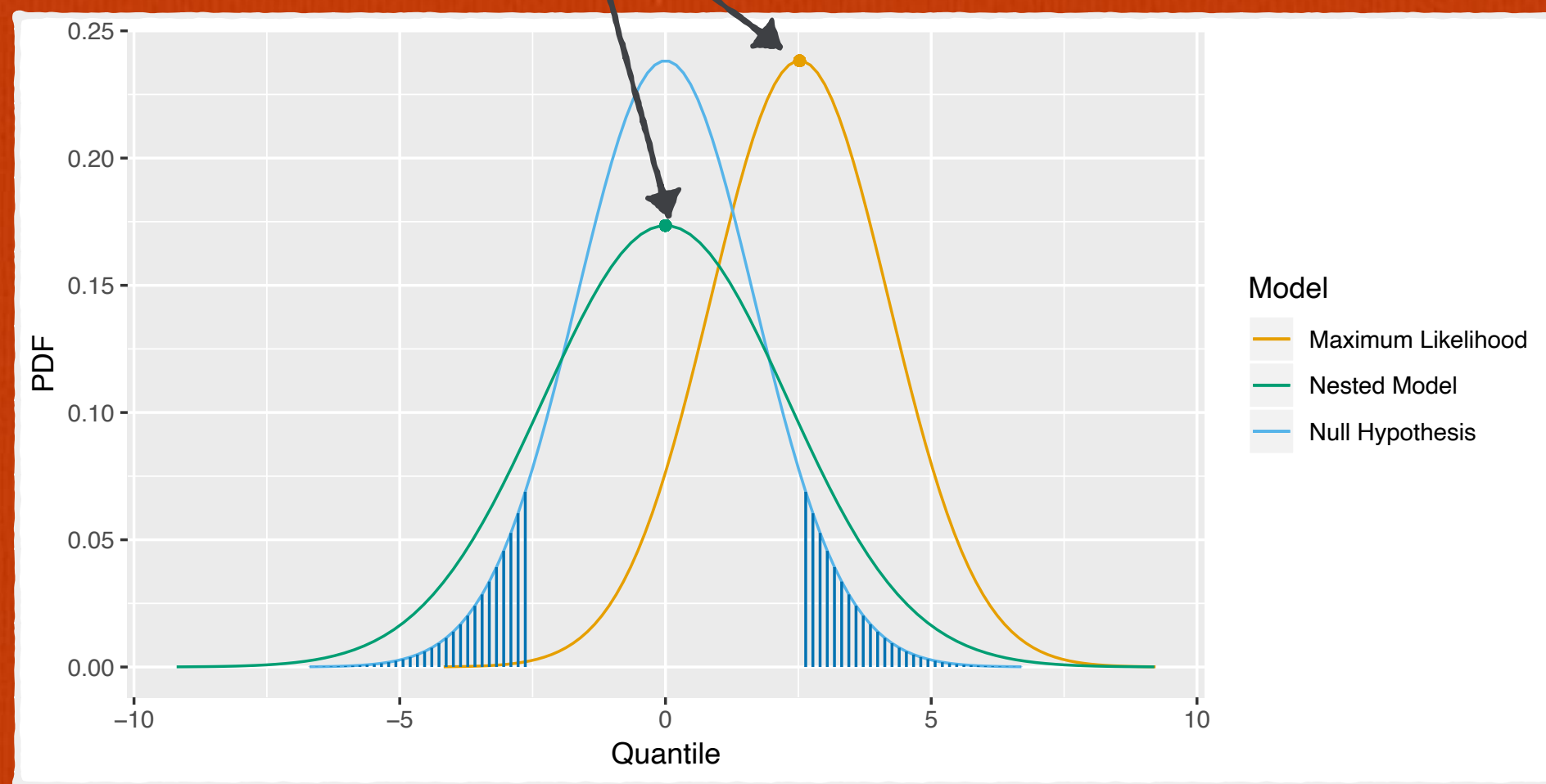
$$\mathcal{L} (\hat{\mu} = 2.52, \hat{\sigma}^2 = 2.83)$$



Probability vs Likelihood

We can also calculate PDF values when one or more parameters is constrained to 0.

$$\frac{\mathcal{L}_0(\mu_0 = 0, \hat{\sigma}_0^2 = 5.26)}{\mathcal{L}(\hat{\mu} = 2.52, \hat{\sigma}^2 = 2.83)}$$



Probability vs Likelihood

The likelihood ratio is a measure of the relative likelihood of two hypothesis