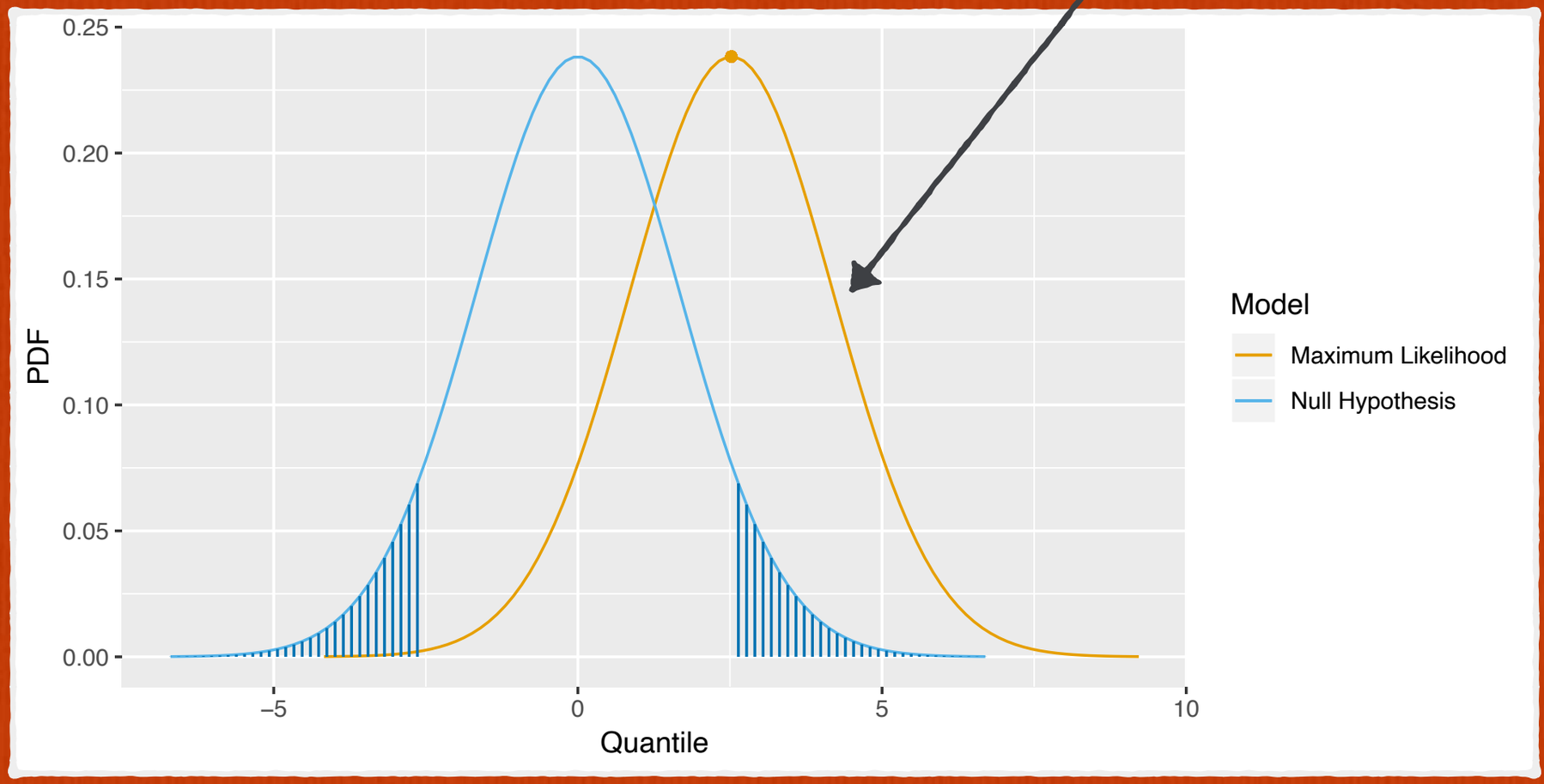
$$f\left(y \mid \mu_1 = \hat{\mu}, \sigma^2 = \hat{\sigma}^2\right)$$

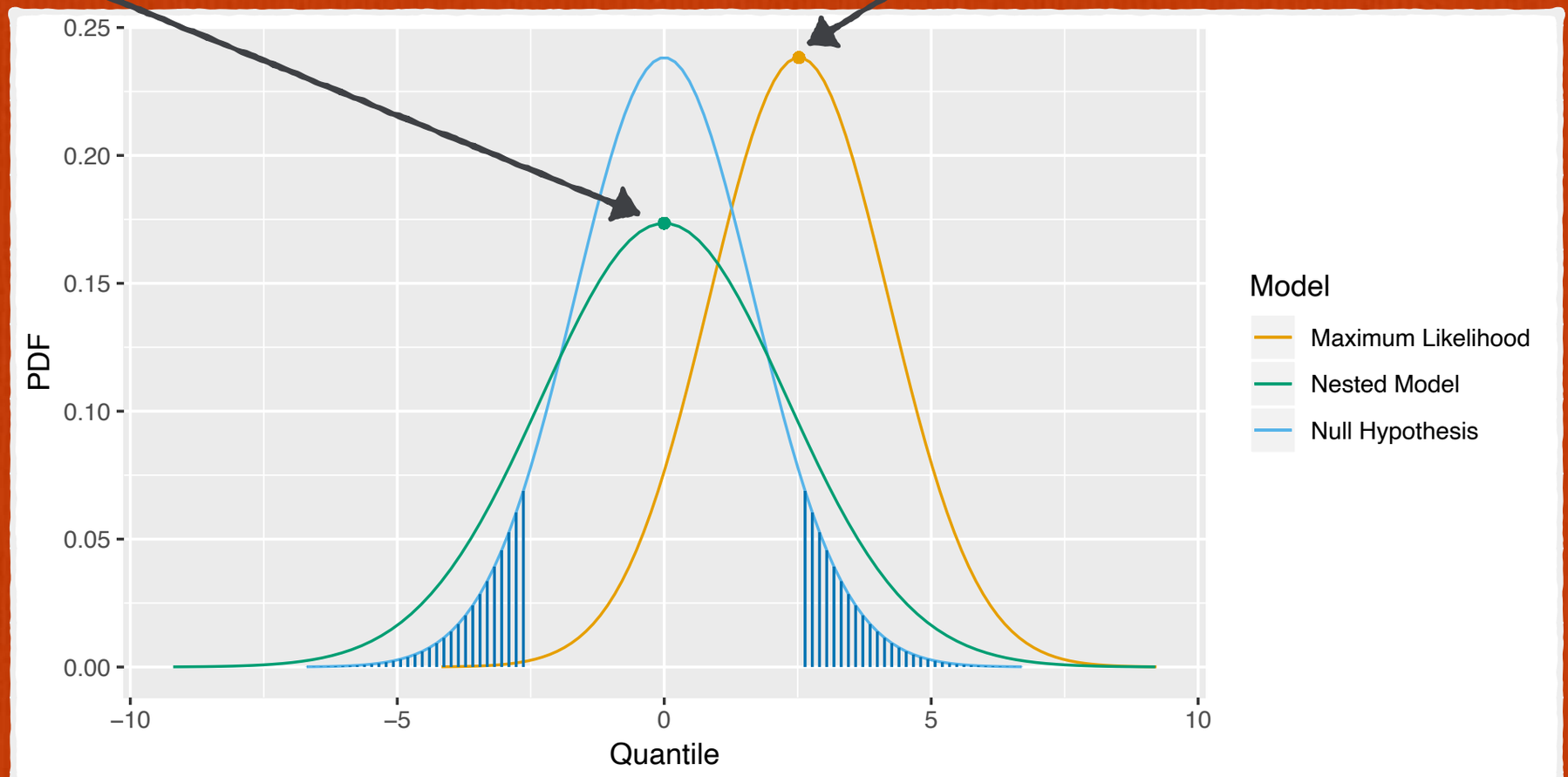


Probability vs Likelihood

We can also calculate PDF values centered on the maximum likelihood estimate of the mean.

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

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



Probability vs Likelihood

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