

$$\begin{aligned}
\text{LFdr}_i &= \frac{P(\theta_i < \theta_\alpha, \delta_i = 1)}{P(\delta_i = 1)} \\
&= \frac{P(\theta_i < \theta_\alpha, \text{stat}_i > \lambda)}{P(\text{stat}_i > \lambda)}
\end{aligned}$$