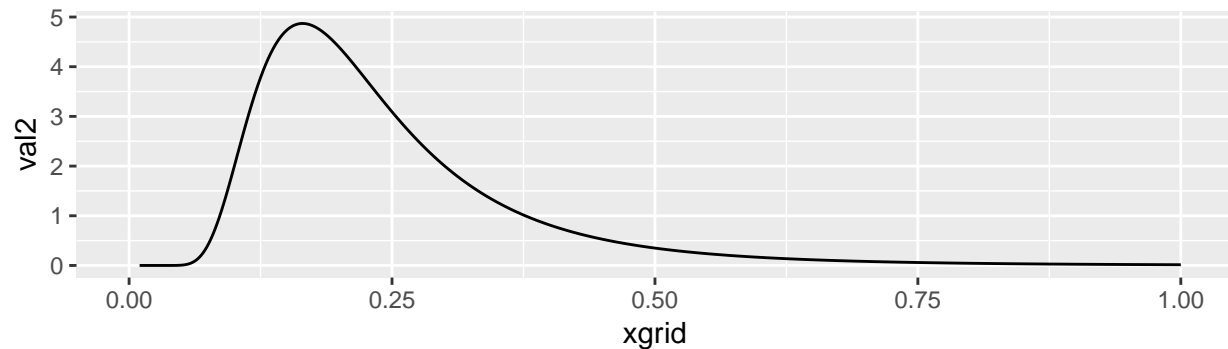


theoretical PDF of  $\sigma^2 \sim \text{Inv-}\chi^2(n, \tau^2)$



Histogram of  $\sigma^2$  by simulations

