

# Pobuzna test varianse

$$H_0 = \sigma^2 = \sigma_0$$

$$H_A = \sigma^2 > \sigma_0$$

$$P\left(\frac{(n-1)S_n^2}{\sigma_0^2} \geq \chi_{1-\alpha}^2\right)$$

$$P\left(\frac{(n-1)S_n^2}{\sigma_A^2} \frac{\sigma_0^2}{\sigma_0^2} \geq \chi_{1-\alpha}^2\right)$$

$$P\left(\frac{(n-1)S_n^2}{\sigma_A^2} \geq \frac{\sigma_0^2}{\sigma_A^2} \chi_{1-\alpha}^2\right)$$

$$E\left(\frac{(n-1)S_n^2}{\sigma_0^2}\right) = n-1$$

$$E\left(\frac{(n-1)S_n^2}{\sigma_A^2} \frac{\sigma_0^2}{\sigma_0^2}\right) = \frac{\sigma_0^2}{\sigma_A^2} (n-1)$$

$$\sim (n-1)$$

