

Precision p , associated standard deviation s :

Convert from a, b to μ, sig

This is useful to interpret the posterior over p .

$$p \sim \text{Gamma}(a, b) \xrightarrow{s = \frac{1}{\sqrt{p}}} s \sim \text{IRGamma}(a, b) \left\{ \begin{array}{l} \mu: \text{Mean of IRGamma} \\ sig: \text{Standard Deviation of IRGamma} \end{array} \right.$$

Convert from μ, sig to a, b

This is useful to define the prior over p .

$$\left. \begin{array}{l} \mu: \text{Mean of IRGamma} \\ sig: \text{Standard Deviation of IRGamma} \end{array} \right\} s \sim \text{IRGamma}(a, b) \xrightarrow{p = \frac{1}{s^2}} p \sim \text{Gamma}(a, b)$$