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Abstract

1 `stats` package

1.1 Distributions

1.1.1 `\N`, Normal

Generates a normal distribution with two parameters. As an example,

x `\N{0}{\sigma^2}`

Will generate

$$x \sim \mathcal{N}\left(0, \sigma^2\right)$$

1.1.2 `\NormalGamma`, Normal-Gamma

Generates a Normal-Gamma distribution with four parameters. As an example,

x `\NormalGamma{\mu}{\lambda}{\alpha}{\beta}`

Will generate

$$x \sim \mathcal{NG}\left(\mu, \lambda, \alpha, \beta\right)$$

1.1.3 `\G`, Gamma

Generates a Gamma distribution with two parameters. As an example,

x `\DistGamma{\alpha}{\beta}`

Will generate

$$x \sim \mathcal{G}\left(\alpha, \beta\right)$$

1.1.4 `\DistInvGamma`, Inverse Gamma

Generates an Inverse Gamma distribution with two parameters (shape, scale). As an example,

x `\DistInvGamma{\alpha}{\beta}`

Will generate

$$x \sim \text{Inv-Gamma}\left(\alpha, \beta\right)$$