Distribuciones Continuas en Julia

Nombre	Parámetros	P(X=k)=f(k)	Media	Varianza	fgm
Beta $B(\alpha, \beta)$	$\alpha, \beta > 0$	$\frac{x^{\alpha-1}(1-x)^{\beta-1}}{B(\alpha,\beta)}$ $x \in [0, 1]$	$\frac{\alpha}{\alpha+\beta}$	$\frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}$	
Chi-cuadrado $\chi^2_{(\nu)}$	$\nu \in \mathbb{N}^*$	$\frac{x^{\frac{\nu}{2}-1}e^{-\frac{x}{2}}}{2^{\frac{\nu}{2}}\Gamma\left(\frac{\nu}{2}\right)}$	k	$2k$	$(1-2t)^{-\frac{k}{2}}$ $t < \frac{1}{2}$
Exponencial $Exp(\lambda)$	$\lambda > 0$	$\lambda e^{-\lambda x}$ $x > 0$	$\frac{1}{\lambda}$	$\frac{1}{\lambda^2}$	$\frac{\lambda}{\lambda - t}$ $t < \lambda$
Fisher $F(\nu 1, \nu 2)$	$\nu 1, \nu 2 > 0$	$\frac{\sqrt{\frac{(\nu 1 x)^{\nu 1}(\nu 2)^{\nu 2}}{(\nu 1 x+\nu 2)^{\nu 1+\nu 2}}}}{x B\left(\frac{\nu 1}{2}, \frac{\nu 2}{2}\right)}$	$\frac{\nu 2}{\nu 2 - 2}$ $\nu 2 > 2$	$\frac{2(\nu 2)^2(\nu 1+\nu 2-2)}{\nu 1(\nu 2-2)^2(\nu 2-4)}$	

Gama $\Gamma(\alpha, \theta)$	$\alpha, \theta > 0$	$\frac{x^{\alpha-1} e^{-\frac{x}{\theta}}}{\Gamma(\alpha)\theta^{\alpha}}$ $x > 0$	$\alpha\theta$	$\alpha\theta^2$	$(1-\theta t)^{-\alpha}$ $t < \frac{1}{\theta}$
Normal $N(\mu, \sigma)$	$\mu \in \mathbb{R}$ $\sigma > 0$	$\frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$ $x \in \mathbb{R}$	μ	σ^2	$e^{\mu t + \sigma^2 \frac{t^2}{2}}$
Student $t_{(\nu)}$	$\nu > 0$	$\frac{1}{\sqrt{\nu}\mathrm{B}\left(\frac{1}{2}, \frac{\nu}{2}\right)} \left(1 + \frac{x^2}{\nu}\right)^{\frac{\nu+1}{2}}$	0	$\frac{\nu}{\nu-2}$ $\nu > 2$ ∞ si $1 < \nu \leq 2$	
Uniforme $U(a, b)$	$a < b$	$\frac{1}{b-a}$ $a \leq x < b$	$\frac{a+b}{2}$	$\frac{(b-a)^2}{12}$	$\begin{cases} \frac{e^{tb}-e^{ta}}{t(b-a)} & \text{si} \quad t \neq 0 \\ 1 & \text{si} \quad t = 0 \end{cases}$