## Distribución t-student con n grados de libertad

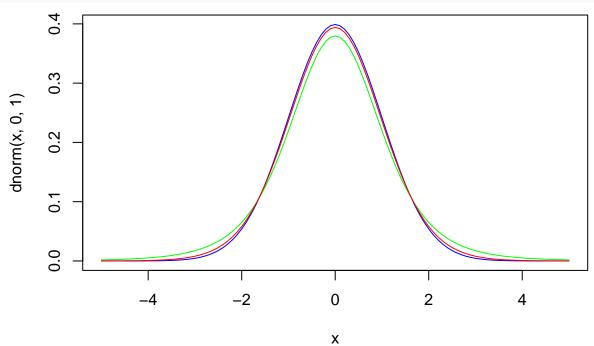
## Contents

La distribución t de student con n grados de libertad se define como

$$t_n = \frac{N(0,1)}{\sqrt{\frac{\chi_n^2}{n}}}$$

La distribución t-student es similar a la N(0,1). De hecho,  $\lim_{n\to\infty}t_n=N(0,1)$ .

```
curve(dnorm(x,0,1), from = -5, to = 5, col = "blue") curve(dt(x,5), add = T, col = "green")
curve(dt(x,20), add = T, col = "red")
```



Propiedades:

- $\begin{array}{ll} \bullet & E[\chi_n^2] = n \\ \bullet & Var[\chi_n^2] = 2n \end{array}$