



## NORMAL CORRELATION

### Why

What is the correlation between components of a normal density.

### Result

**Proposition 1.** *Let  $g \sim \mathcal{N}(\mu, \Sigma)$ . Then the correlation between the  $i$ th and  $j$ th component random variables is*

$$\frac{\Sigma_{ij}}{\sqrt{\Sigma_{ii}\Sigma_{jj}}}$$



