$$\diamondplus$$

Normal Correlation

1   Why

What is the correlation between components of a normal density.

2   Result

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

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

Normal Densities   Multivariate Real Densities

Probability Densities

Real Integrals

Nonnegative Integrals

Exponential   Simple Integrals

2

Real Square Roots   Simple Functions