



## NORMAL DIFFERENTIAL ENTROPY

### Why

What is the differential mutual information between two components of a multivariate normal.

### Result

PROPOSITION 1. *Let  $g \sim \mathcal{N}(\mu, \Sigma)$  Then the differential entropy of  $g$  is*

$$\frac{1}{2} \ln \left( (2\pi e)^d \mathbf{det} \Sigma \right)$$

