

- 首先给出多维高斯分布的公式：

$$p(x_1, x_2, \dots, x_n) = \frac{1}{\sqrt{2\pi * \det(\Sigma)}} e^{(-\frac{1}{2}(x-\mu)^T \Sigma^{-1} (x-\mu))}$$

- $KL(p_1||p_2) = \frac{1}{2}[\log \frac{\det(\Sigma_2)}{\det(\Sigma_1)} - d + \text{tr}(\Sigma_2^{-1}\Sigma_1) + (\mu_2 - \mu_1)^T \Sigma_2^{-1}(\mu_2 - \mu_1)]$









