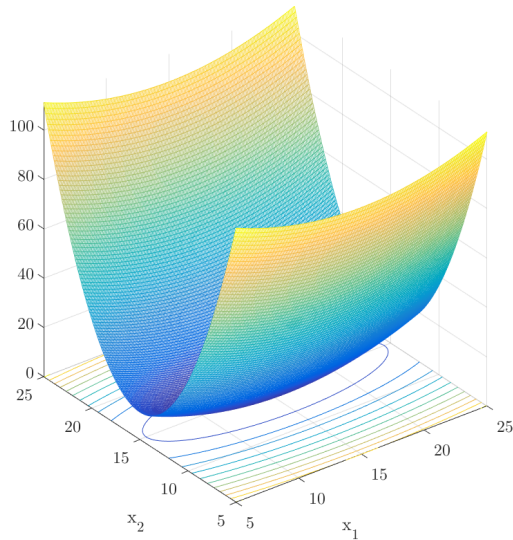
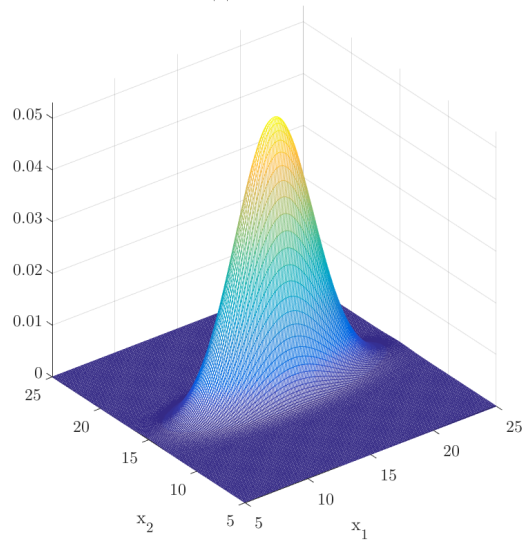


$$(\vec{x} - \vec{\mu})^T \cdot \Sigma^{-1} \cdot (\vec{x} - \vec{\mu})$$



$$p(\vec{x}) = \frac{1}{2\pi|\Sigma|^{1/2}} \cdot e^{-\frac{1}{2} \cdot (\vec{x} - \vec{\mu})^T \cdot \Sigma^{-1} \cdot (\vec{x} - \vec{\mu})}$$



$$U = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

$$D = \begin{pmatrix} 3^2 & 0 \\ 0 & 1^2 \end{pmatrix}$$

