Inverse A^{-1} of A:

- $A = L \cdot D \cdot L^T$

$$\Rightarrow A^{-1} = (L^T)^{-1} \cdot D^{-1} \cdot L^{-1}$$

D diagonal

- Because D is diagonal $\Rightarrow D^{-1}$ is diagonal with diagonal elements $(D^{-1})_{ii} = 1/(D)_{ii}$

$$D = \begin{bmatrix} \text{var}(m_1) & 0 & \cdots & 0 \\ 0 & \text{var}(m_2) & \cdots & \\ & & \ddots & \end{bmatrix}$$

$$D^{-1} = \begin{bmatrix} 1/\text{var}(m_1) & 0 & \cdots & 0 \\ 0 & 1/\text{var}(m_2) & \cdots & 0 \\ & & \ddots & \end{bmatrix}$$

- L^{-1} ?