

# Landmark assignment

## Maximum likelihood landmark assignment

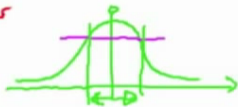
$$(z - h(x))^T \Psi^{-1} (z - h(x)) < \epsilon$$

$\Psi$  ... covariance matrix

$$\Psi = H \bar{\Sigma} H^T + Q$$

State error  
variance propagation

Meas. error



Mahalanobis distance

$\mathcal{N}(\mu, \Sigma^2)$  ... PDF const.  $\cdot e^{-\frac{1}{2} (x - \mu)^T \Sigma^{-1} (x - \mu)}$

