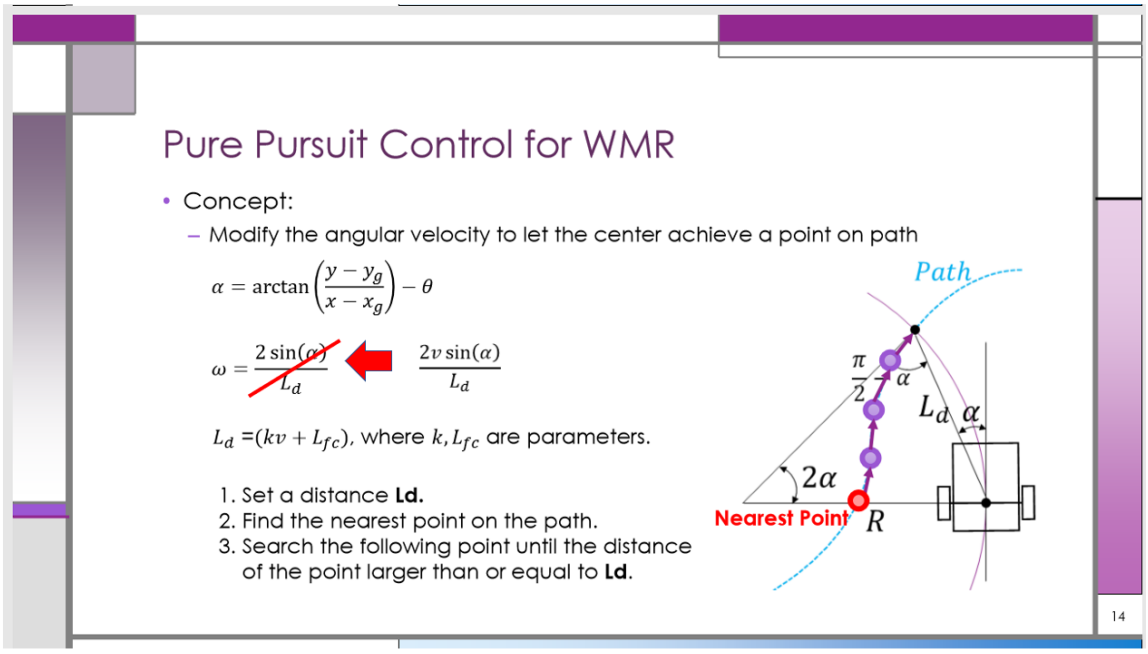
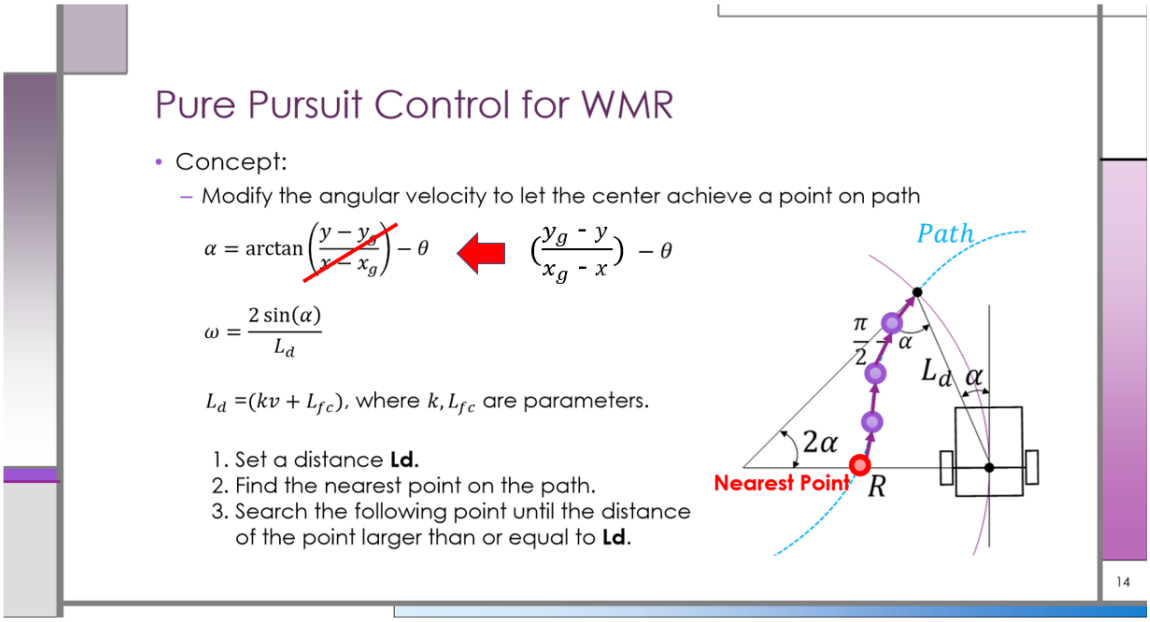
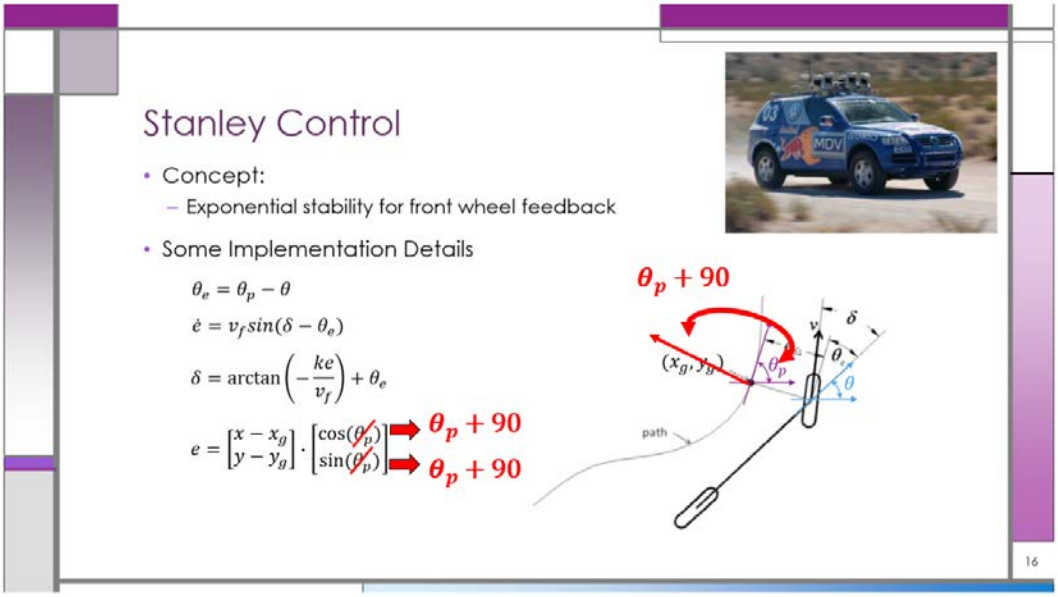
1. Page 14:



2. Page 14:



3. Page 16


Stanley Control
• Concept:
– Exponential stability for front wheel feedback
• Some Implementation Details
$\theta_e = \theta_p - \theta$
$\dot{e} = v_f sin(\delta - \theta_e)$
$\delta = \arctan\left(-\frac{ke}{v_f}\right) + \theta_e$
$e = \begin{bmatrix} x - x_g \\ y - y_g \end{bmatrix} \cdot \begin{bmatrix} \cos(\theta_p) \\ \sin(\theta_p) \end{bmatrix}$
$\theta_p + 90$
$\theta_p + 90$
$\theta_p + 90$
(x_g, y_g)
θ_p
δ
θ
path
16