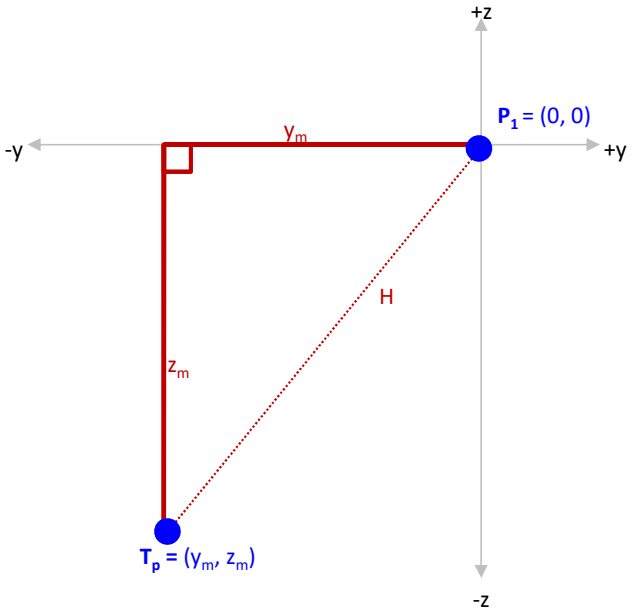
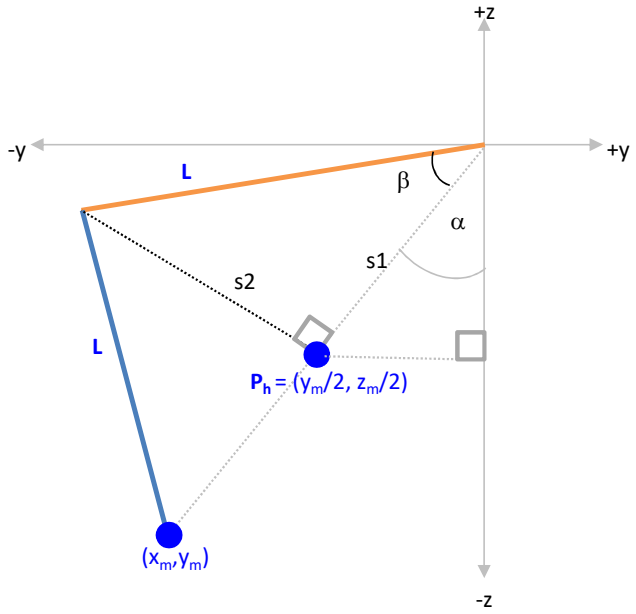


$H = (y_m^2 + z_m^2)^{(1/2)}$

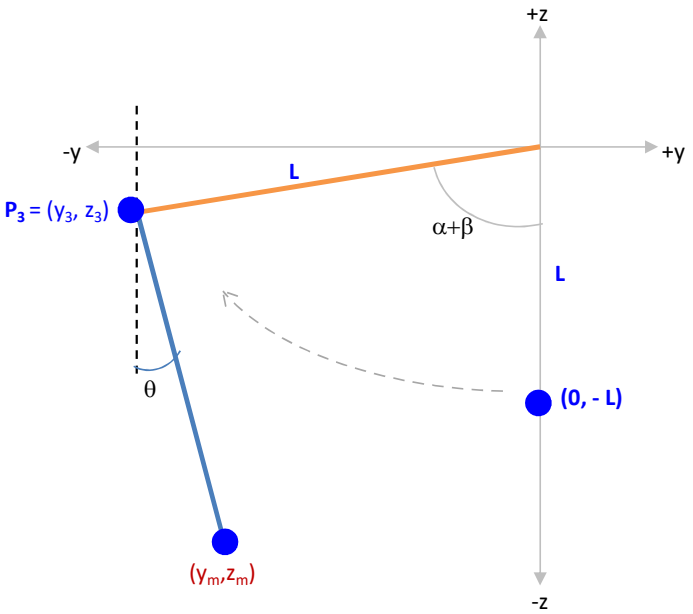


$s1 = H/2$

$s2 = (L^2 - s1^2)^{(1/2)}$

$\beta = \tan^{-1}(s2/s1)$

$\alpha = \tan^{-1}((y_m/2) / (z_m/2))$



servo 1 = $\alpha+\beta$

counterclockwise rotation

$$\begin{bmatrix} y_3 \\ z_3 \end{bmatrix} = \begin{bmatrix} \cos(\alpha+\beta) & \sin(\alpha+\beta) \\ -\sin(\alpha+\beta) & \cos(\alpha+\beta) \end{bmatrix} \begin{bmatrix} 0 \\ -L \end{bmatrix}$$

servo 2 = $\theta = \tan^{-1}((z_m - z_3) / (y_m - y_3))$