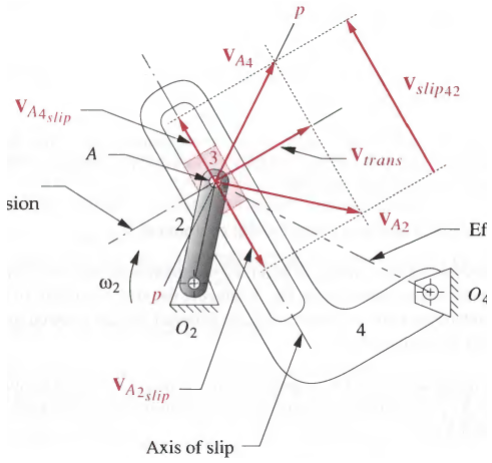
# ME 222: Kinematics of Machines and Mechanisms

## [L23] Velocity Analysis-2



# VELOCITY OF SLIP



# Inversion of Slider Crank Mechanism

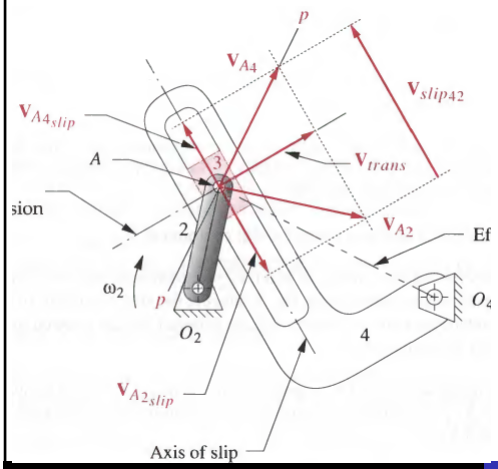
Given $\theta_2, \theta_3, \theta_4, \omega_2$,

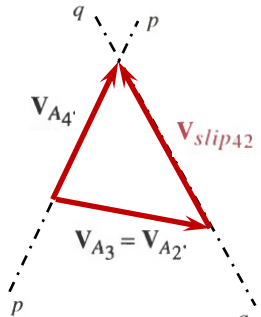
find $\omega_3, \omega_4, V_A$,

$v_{A_2} = (AO_2)\omega_2$

$\mathbf{V}_{A_3} = \mathbf{V}_{A_2}$

$\mathbf{V}_{A_4} = \mathbf{V}_{A_2} + \mathbf{V}_{slip42}$



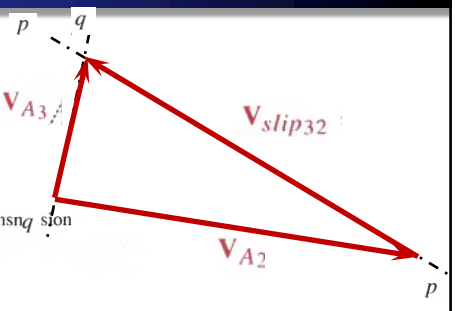

$\omega_4 = \omega_3 = \dfrac{V_{A_4}}{AO_4}$

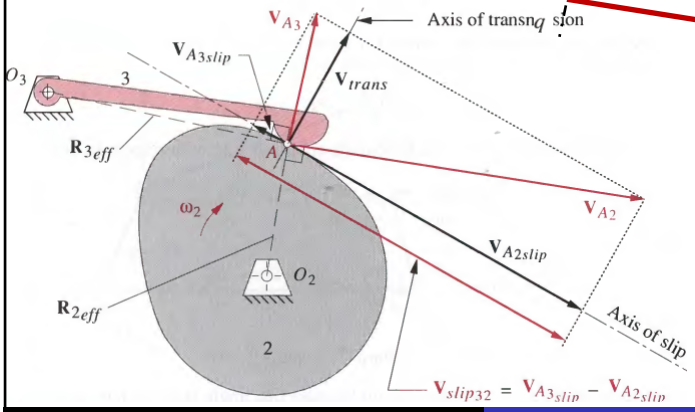


# Cam and follower

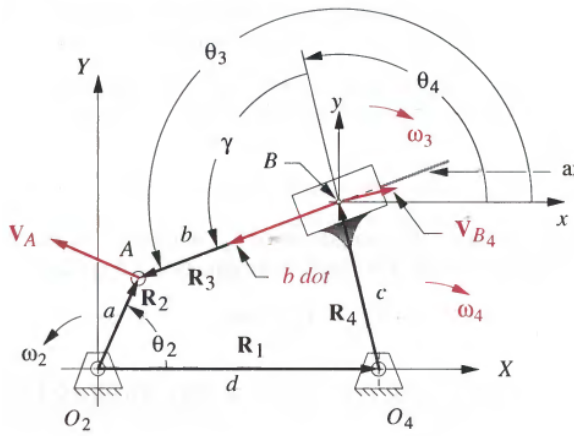
$v_{A_2} = (AO_2)\omega_2$

$\mathbf{V}_{A_3} = \mathbf{V}_{A_2} + \mathbf{V}_{slip32}$



# Homework [6.8(row b), 6.9 (row b)]






Thank you

Next Class: Velocity Analysis - 3