

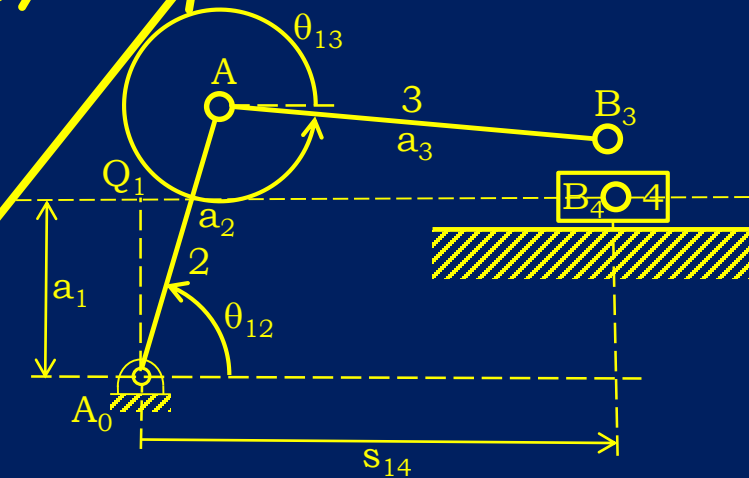
2. Kinematic Analysis

Slider-Crank

$$\overrightarrow{A_0A_1} + \overrightarrow{A_0A_2} + \overrightarrow{A_2A_3} + \overrightarrow{A_3B_3} = \overrightarrow{A_0Q_1} + \overrightarrow{Q_1B_4}$$

$$0 + a_2 e^{i\theta_{12}} + 0 + a_3 e^{i\theta_{13}} = ia_1 + s_{14}$$

Body Vectors



Zero Vectors

Translational Joint Variable Vector ($s_{4/1}$)