

$$\overrightarrow{O_0 O_2} = b_1 \overrightarrow{z_1}$$

$$\overrightarrow{O_2 O_3} = b_2 \overrightarrow{z_2}$$

$$\overrightarrow{O_0 G_1} = c_1 \overrightarrow{z_1}$$

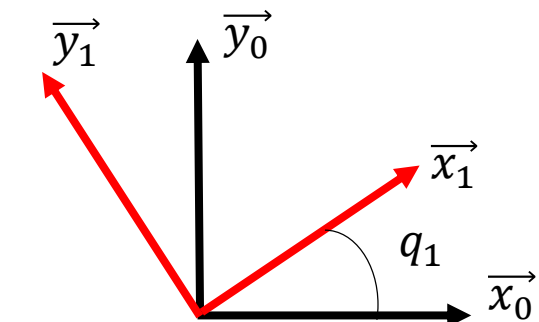
$$\overrightarrow{O_2 G_2} = c_2 \overrightarrow{z_2}$$

$$\overrightarrow{O_3 G_3} = c_3 \overrightarrow{z_3}$$

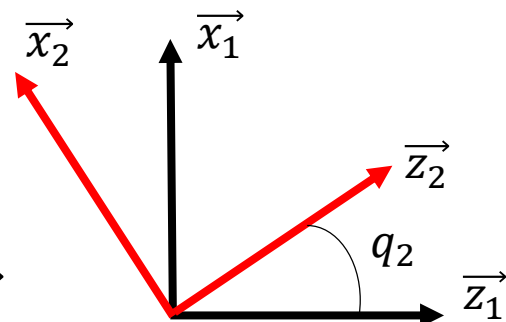
$$\bar{I}(G_1, S_1) = \begin{bmatrix} I_{xx_1} & 0 & 0 \\ 0 & I_{yy_1} & 0 \\ 0 & 0 & I_{zz_1} \end{bmatrix}_{(\overrightarrow{x_1}, \overrightarrow{y_1}, \overrightarrow{z_1})}$$

$$\bar{I}(G_2, S_2) = \begin{bmatrix} I_{xx_2} & 0 & 0 \\ 0 & I_{yy_2} & 0 \\ 0 & 0 & I_{zz_2} \end{bmatrix}_{(\overrightarrow{x_2}, \overrightarrow{y_2}, \overrightarrow{z_2})}$$

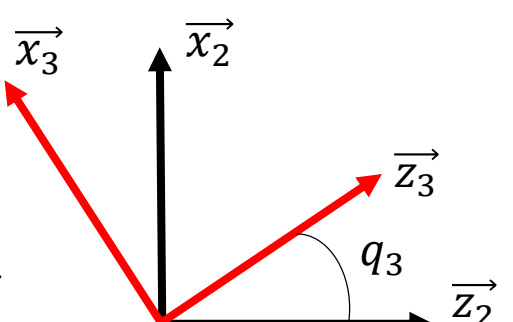
$$\bar{I}(G_3, S_3) = \begin{bmatrix} I_{xx_3} & 0 & 0 \\ 0 & I_{yy_3} & 0 \\ 0 & 0 & I_{zz_3} \end{bmatrix}_{(\overrightarrow{x_3}, \overrightarrow{y_3}, \overrightarrow{z_3})}$$



$${}^0T_1 = \begin{bmatrix} \cos(q_1) & -\sin(q_1) & 0 & 0 \\ \sin(q_1) & \cos(q_1) & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$



$${}^1T_2 = \begin{bmatrix} \cos(q_2) & 0 & \sin(q_2) & 0 \\ 0 & 1 & 0 & 0 \\ -\sin(q_2) & 0 & \cos(q_2) & b_1 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$



$${}^2T_3 = \begin{bmatrix} \cos(q_3) & 0 & \sin(q_3) & 0 \\ 0 & 1 & 0 & 0 \\ -\sin(q_3) & 0 & \cos(q_3) & b_2 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

