

$$\omega_3^{\mathbb{R}} = \frac{\omega_3}{0} \Big| \frac{0}{\omega_3^*}$$

$$\omega_3 = \frac{\omega \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{0} \Big| \frac{0}{\bar{\omega} \mathbf{z} 1} \Big| \frac{\varkappa \Gamma \psi \mathbf{z} \frac{d}{0} \Big| \frac{0}{\bar{e}}}{\varkappa \Gamma \psi \mathbf{z} u^* \Big| 0}$$

$$\frac{\varphi \Gamma \mathbf{z} \frac{d}{0} \Big| \frac{0}{e}}{\varphi \Gamma \mathbf{z} \begin{bmatrix} u \\ 0 \end{bmatrix}} \Big| \frac{\Omega \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}$$

$$\omega_3^* = \frac{\bar{\omega}_a \mathbf{z} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} \Big| \frac{0}{\bar{\omega}_a \mathbf{z} \bar{a}} \Big| \frac{0}{0}$$

$$\frac{0}{0} \Big| \frac{\bar{\omega}_a \mathbf{z} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}$$

$$\omega \in \mathfrak{h}_{\infty} \underbrace{\mathfrak{h}_{\infty} \mathbb{K}}: \quad \Omega \in \mathfrak{h}_{\infty} \underbrace{\mathfrak{h}_{\infty}^2 \mathbb{K}_2}: \quad \omega_a \mathbf{z} a \in \mathfrak{h}_{\infty} \underbrace{\mathfrak{h}_{\infty}^3 \mathbb{K}_3}: \quad \varphi \in \mathfrak{h}_{\infty}^2 \mathbb{K}: \quad \psi \in \mathfrak{h}_{\infty} \mathbb{K}_2$$

$$\begin{bmatrix} \varphi_1 \\ \tilde{\varphi}_2 \end{bmatrix} = \begin{bmatrix} -\bar{\varphi}_2 \\ \bar{\varphi}_1 \end{bmatrix} \begin{bmatrix} \psi_1 & \tilde{\psi}_2 \end{bmatrix} = \begin{bmatrix} -\bar{\psi}_2 & \bar{\psi}_1 \end{bmatrix}$$

$$\frac{f_3^0}{0} \Big| \frac{0}{\tilde{f}_3^0} \underbrace{\frac{D_3}{0} \Big| \frac{0}{J_3 D_3 J_3}} \times \frac{f_3^1}{0} \Big| \frac{0}{\tilde{f}_3^1} = \frac{f_3^0 D_3 \times f_3^1}{0} \Big| \frac{0}{\tilde{f}_3^0 J_3 D_3 J_3 \times \tilde{f}_3^1}$$

$$f_3^0 \underbrace{D_3 \times f_3^1}_{\substack{f^0 df^1 \mathbf{z} \frac{1}{0} \Big| \frac{0}{1} \\ 0}} = \frac{0}{\bar{f}^0 d\bar{f}^1 \mathbf{z} 1} \Big| \frac{\varkappa \Gamma f^0 \underline{\varepsilon} F^1 - f^1 \underline{\varepsilon}^* \mathbf{z} \frac{d}{0} \Big| \frac{0}{\bar{e}}}{\varkappa \Gamma \bar{f}^0 \underline{\varepsilon} F^1 - \bar{f}^1 \underline{\varepsilon}^* \mathbf{z} u^* \Big| 0}$$

$$\frac{F^0 \underline{\varepsilon} f^1 - F^1 \underline{\varepsilon} \Gamma \mathbf{z} \frac{d}{0} \Big| \frac{0}{e}}{F^0 \underline{\varepsilon} \bar{f}^1 - F^1 \underline{\varepsilon} \Gamma \mathbf{z} \begin{bmatrix} u \\ 0 \end{bmatrix}} \Big| \frac{F^0 dF^1 \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}$$

$$\tilde{f}_3^0 \underbrace{J_3 D_3 J_3 \times \tilde{f}_3^1}_{\substack{\bar{f}_b^0 d\bar{f}_c^1 \mathbf{z} \frac{\bar{b}\bar{c}}{0} \Big| \frac{0}{0} + \bar{f}^0 d\bar{f}^1 \mathbf{z} \frac{0}{0} \Big| \frac{0}{1} \\ 0}} = \frac{0}{\bar{f}_b^0 d\bar{f}_c^1 \mathbf{z} \bar{b}\bar{c}} \Big| \frac{0}{0}$$

$$\frac{0}{0} \Big| \frac{\bar{f}_b^0 d\bar{f}_c^1 \mathbf{z} \frac{\bar{b}\bar{c}}{0} \Big| \frac{0}{0} + \bar{f}^0 d\bar{f}^1 \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}$$

$$\omega = f^0 df^1: \quad \Omega = F^0 dF^1: \quad \omega_a \mathbf{z} a = f_b^0 df_c^1 \mathbf{z} bc: \quad \varphi = F^0 \underline{\varepsilon} f^1 - F^1 \underline{\varepsilon}: \quad \psi = F^0 \underline{\varepsilon} \bar{f}^1 - F^1 \underline{\varepsilon}$$

$$\psi = f^0 \underline{\varepsilon} F^1 - f^1 \underline{\varepsilon}^*: \quad \psi = \bar{f}^0 \underline{\varepsilon} F^1 - \bar{f}^1 \underline{\varepsilon}^*$$

$$\frac{0}{-\varkappa J_3} \left| \begin{array}{c|c} J_3 & \omega_3 \\ \hline 0 & \tilde{\omega}_3 \end{array} \right| \frac{0}{0} = \frac{0}{-\varkappa J_3} \left| \begin{array}{c|c} J_3 & \omega_3 \\ \hline 0 & \tilde{\omega}_3 \end{array} \right|^{-1} = \frac{0}{-\varkappa J_3} \left| \begin{array}{c|c} J_3 & \omega_3 \\ \hline 0 & \tilde{\omega}_3 \end{array} \right| \frac{0}{0} \left| \begin{array}{c|c} -\varkappa J_3 & \\ \hline 0 & \end{array} \right| = \frac{J_3 \tilde{\omega}_3 J_3}{0} \left| \begin{array}{c|c} 0 \\ \hline J_3 \omega_3 J_3 \end{array} \right|$$

$$J_3 \tilde{\omega}_3 J_3 = \frac{\omega_a \mathbf{X} \left| \begin{array}{c|c} a & 0 \\ \hline 0 & 0 \end{array} \right| + \omega \mathbf{X} \left| \begin{array}{c|c} 0 & 0 \\ \hline 0 & 1 \end{array} \right|}{0} \left| \begin{array}{c|c} 0 \\ \hline \omega_a \mathbf{X} a \end{array} \right| \left| \begin{array}{c|c} 0 \\ \hline 0 \end{array} \right|$$

$$J_3 \omega_3 J_3 = \frac{\bar{\omega} \mathbf{X} \left| \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \right|}{0} \left| \begin{array}{c|c} 0 \\ \hline \omega \mathbf{X} 1 \end{array} \right| \left| \begin{array}{c|c} -\varkappa \Gamma \bar{\psi} \mathbf{X} \left| \begin{array}{c|c} d^t & 0 \\ \hline 0 & e^t \end{array} \right| \\ \hline -\varkappa \Gamma \bar{\psi} \mathbf{X} [u^t \ 0] \end{array} \right|$$

$$\text{LHS} = \frac{\tilde{\omega}_a \tilde{\omega} \mathbf{X} \left| \begin{array}{c|c} \bar{a} & 0 \\ \hline 0 & 0 \end{array} \right| + \tilde{\omega} \tilde{\omega} \mathbf{X} \left| \begin{array}{c|c} 0 & 0 \\ \hline 0 & 1 \end{array} \right|}{0} \left| \begin{array}{c|c} 0 \\ \hline \tilde{\omega}_a \tilde{\omega} \mathbf{X} \bar{a} \end{array} \right| \left| \begin{array}{c|c} 0 \\ \hline 0 \end{array} \right| = \text{RHS}$$

$$\text{LHS} = \frac{\tilde{\omega} \tilde{\omega} \mathbf{X} \left| \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \right|}{0} \left| \begin{array}{c|c} 0 \\ \hline \tilde{\omega} \tilde{\omega} \mathbf{X} 1 \end{array} \right| \left| \begin{array}{c|c} \varkappa \tilde{\Gamma} \tilde{\psi} \tilde{\omega} \mathbf{X} \left| \begin{array}{c|c} d^* & 0 \\ \hline 0 & e^* \end{array} \right| \\ \hline \varkappa \tilde{\Gamma} \tilde{\psi} \tilde{\omega} \mathbf{X} [u^* \ 0] \end{array} \right| = \text{RHS}$$

$$\frac{\omega_3}{0} \left| \begin{array}{c|c} 0 \\ \hline \tilde{\omega}_3 \end{array} \right| = - \frac{0}{-\varkappa J_3} \left| \begin{array}{c|c} J_3 & \omega_3 \\ \hline 0 & \tilde{\omega}_3 \end{array} \right|^{-1} = \frac{0}{-\varkappa J_3} \left| \begin{array}{c|c} J_3 & \omega_3 \\ \hline 0 & \tilde{\omega}_3 \end{array} \right|^{-1}$$

$$\frac{\omega_3}{0} \left| \begin{array}{c|c} 0 \\ \hline \tilde{\omega}_3 \end{array} \right| = \frac{\varrho \mathbf{X} \left| \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \right|}{0} \left| \begin{array}{c|c} 0 \\ \hline \varrho \mathbf{X} 1 \end{array} \right| \left| \begin{array}{c|c} 0 \\ \hline \varrho \mathbf{X} \left| \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \right| \end{array} \right|$$

$$\frac{\omega_3}{0} \left| \begin{array}{c|c} 0 \\ \hline \tilde{\omega}_3 \end{array} \right| = \frac{0}{0} \left| \begin{array}{c|c} \varrho \mathbf{X} \left| \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \right| \\ \hline 0 \end{array} \right| \left| \begin{array}{c|c} 0 \\ \hline \varrho \mathbf{X} 1 \end{array} \right| \left| \begin{array}{c|c} 0 \\ \hline \varrho \mathbf{X} \left| \begin{array}{c|c} 1 & 0 \\ \hline 0 & 1 \end{array} \right| \end{array} \right|$$

$$\omega_a \mathbf{x} \frac{a}{0} \Big| \frac{0}{0} + \omega \mathbf{x} \frac{0}{0} \Big| \frac{0}{1} = \omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} \quad \omega_a \mathbf{x} a = \bar{\omega} \mathbf{x} 1: \quad \omega_a \mathbf{x} \frac{a}{0} \Big| \frac{0}{0} + \omega \mathbf{x} \frac{0}{0} \Big| \frac{0}{1} = \Omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}: \quad \varphi = 0: \quad \psi = 0$$

$$\Rightarrow \omega_a \mathbf{x} a = \omega \mathbf{x} \bar{\omega} \mathbf{x} 1: \quad \Omega = \omega \Rightarrow \omega = \bar{\omega} = \varrho: \quad \omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} = \varrho \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}: \quad \bar{\omega} \mathbf{x} \varrho \mathbf{x} 1: \quad \Omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} = \varrho \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}$$

$$\bar{\omega}_a \mathbf{x} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{x} \frac{0}{0} \Big| \frac{0}{1} = \bar{\omega} \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} = \varrho \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}: \quad \bar{\omega}_a \mathbf{x} \bar{a} = \omega \mathbf{x} \varrho \mathbf{x} 1$$

$$\bar{\omega}_a \mathbf{x} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{x} \frac{0}{0} \Big| \frac{0}{1} = 1 \bar{O} \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} = \bar{\varrho} \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} = \varrho \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}$$

$$\frac{\omega_3}{0} \Big| \frac{0}{\tilde{\omega}_3} = -\frac{\omega_3}{0} \Big| \frac{0}{\tilde{\omega}_3}$$

$$\varrho | \omega_3 = \varrho | \tilde{\omega}_3 \text{ unbek } \frac{0}{-\kappa J_3} \Big| \frac{J_3}{0} \frac{\varrho}{0} \Big| \frac{0}{\varrho} \frac{0}{-\kappa J_3} \Big| \frac{J_3}{0}^{-1} = -\frac{\varrho}{0} \Big| \frac{0}{\varrho}$$

$$\omega_3 = \frac{\omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} \quad \Big| \quad 0 \quad \Big| \quad \kappa \Gamma \dot{\varphi} \mathbf{x} \frac{d}{0} \Big| \frac{0}{e}}{0 \quad \Big| \quad -\omega \mathbf{x} 1 \quad \Big| \quad \kappa \Gamma \dot{\varphi} \mathbf{x} u^* \Big| 0}$$

$$\frac{\varphi \Gamma \mathbf{x} \frac{d}{0} \Big| \frac{0}{e} \quad \Big| \quad \varphi \Gamma \mathbf{x} \begin{bmatrix} u \\ 0 \end{bmatrix} \quad \Big| \quad \Omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}}$$

$$\tilde{\omega}_3 = \frac{\bar{\omega}_a \mathbf{x} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \omega \mathbf{x} \frac{1/3}{0} \Big| \frac{0}{-1} \quad \Big| \quad 0 \quad \Big| \quad 0}{0 \quad \Big| \quad \bar{\omega}_a \mathbf{x} \bar{a} + \omega \mathbf{x} 1/3 \quad \Big| \quad 0}$$

$$\frac{0 \quad \Big| \quad 0 \quad \Big| \quad \bar{\omega}_a \mathbf{x} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{x} \frac{1/3}{0} \Big| \frac{0}{-1}}$$

$$\omega \in \mathfrak{h}_{\infty} \underbrace{\mathfrak{h}_{\infty} \mathbb{K}}: \quad \Omega \in \mathfrak{h}_{\infty} \underbrace{\mathfrak{h}_{\infty}^2 \mathbb{K}_2}: \quad \omega_a \mathbf{x} a \in \mathfrak{h}_{\infty} \underbrace{\mathfrak{h}_{\infty}^3 \mathbb{K}_3}: \quad \varphi \in \mathfrak{h}_{\infty}^2 \mathbb{K}$$

$$4 \underline{\tilde{x}} = \underline{y + 3\tilde{y}}$$

$$\frac{\omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} \quad \Big| \quad 0 \quad \Big| \quad \kappa \Gamma \psi \mathbf{x} \frac{d}{0} \Big| \frac{0}{e}}{0 \quad \Big| \quad \bar{\omega} \mathbf{x} 1 \quad \Big| \quad \kappa \Gamma \psi \mathbf{x} u^* \Big| 0} = \frac{\dot{\omega} \mathbf{x} \frac{1}{0} \Big| \frac{0}{1} \quad \Big| \quad 0 \quad \Big| \quad \dot{\Gamma} \dot{\varphi} \mathbf{x} \frac{d}{0} \Big| \frac{0}{e}}{0 \quad \Big| \quad \bar{\omega}^* \mathbf{x} 1 \quad \Big| \quad \dot{\Gamma} \dot{\varphi} \mathbf{x} u^* \Big| 0}$$

$$\frac{\varphi \Gamma \mathbf{x} \frac{d}{0} \Big| \frac{0}{e} \quad \Big| \quad \varphi \Gamma \mathbf{x} \begin{bmatrix} u \\ 0 \end{bmatrix} \quad \Big| \quad \Omega \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}}{\kappa \psi \dot{\Gamma} \mathbf{x} \frac{d}{0} \Big| \frac{0}{e} \quad \Big| \quad \kappa \psi \dot{\Gamma} \mathbf{x} \begin{bmatrix} u \\ 0 \end{bmatrix} \quad \Big| \quad \dot{\Omega} \mathbf{x} \frac{1}{0} \Big| \frac{0}{1}}$$

$$= \frac{\bar{\omega} \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ \omega \mathbf{z} \mathbf{1} \end{array} \Big| \frac{-\varkappa \Gamma \bar{\phi} \mathbf{z} \frac{d}{0} \Big| \frac{0}{\bar{e}}}{-\varkappa \Gamma \bar{\phi} \mathbf{z} u^* \Big| 0} = - \frac{\omega \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ \bar{\omega} \mathbf{z} \mathbf{1} \end{array} \Big| \frac{\varkappa \Gamma \psi \mathbf{z} \frac{d}{0} \Big| \frac{0}{\bar{e}}}{\varkappa \Gamma \psi \mathbf{z} u^* \Big| 0}$$

$$\frac{-\bar{\psi} \Gamma \mathbf{z} \frac{d}{0} \Big| \frac{0}{e}}{-\bar{\psi} \Gamma \mathbf{z} \begin{bmatrix} u \\ 0 \end{bmatrix}} \Big| \frac{\bar{\Omega} \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{\varphi \Gamma \mathbf{z} \frac{d}{0} \Big| \frac{0}{e}} \Big| \frac{\varphi \Gamma \mathbf{z} \begin{bmatrix} u \\ 0 \end{bmatrix}}{\Omega \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}$$

$$\bar{\omega} = -\omega: \quad \psi = \bar{\phi}: \quad \Omega = -\bar{\Omega}$$

$$\frac{\bar{\omega}_a \mathbf{z} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} * \\ 0 \end{array} \Big| \begin{array}{c} 0 \\ \bar{\omega}_a \mathbf{z} \bar{a} \end{array} \Big| \begin{array}{c} 0 \\ 0 \end{array} =$$

$$\frac{0}{0} \Big| \begin{array}{c} 0 \\ \bar{\omega}_a \mathbf{z} \bar{a} \end{array} \Big| \frac{\bar{\omega}_a \mathbf{z} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} =$$

$$\frac{\bar{\omega}_a^* \mathbf{z} \frac{\bar{a}^*}{0} \Big| \frac{0}{0} + \bar{\omega}^* \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ \bar{\omega}_a^* \mathbf{z} \bar{a}^* \end{array} \Big| \begin{array}{c} 0 \\ 0 \end{array} =$$

$$\frac{0}{0} \Big| \begin{array}{c} 0 \\ \bar{\omega}_a^* \mathbf{z} \bar{a}^* \end{array} \Big| \frac{\bar{\omega}_a^* \mathbf{z} \frac{\bar{a}^*}{0} \Big| \frac{0}{0} + \bar{\omega}^* \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} =$$

$$\frac{\omega_a \mathbf{z} \frac{a^t}{0} \Big| \frac{0}{0} + \omega \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ \omega_a \mathbf{z} a^t \end{array} \Big| \begin{array}{c} 0 \\ 0 \end{array} =$$

$$\frac{0}{0} \Big| \begin{array}{c} 0 \\ \omega_a \mathbf{z} a^t \end{array} \Big| \frac{\omega_a \mathbf{z} \frac{a^t}{0} \Big| \frac{0}{0} + \omega \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} =$$

$$- \frac{\bar{\omega}_a \mathbf{z} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ \bar{\omega}_a \mathbf{z} \bar{a} \end{array} \Big| \begin{array}{c} 0 \\ 0 \end{array} =$$

$$\frac{0}{0} \Big| \begin{array}{c} 0 \\ \bar{\omega}_a \mathbf{z} \bar{a} \end{array} \Big| \frac{\bar{\omega}_a \mathbf{z} \frac{\bar{a}}{0} \Big| \frac{0}{0} + \bar{\omega} \mathbf{z} \frac{0}{0} \Big| \frac{0}{1}}{0}$$

$$\bar{\omega}_a \mathbf{z} \bar{a} = -\omega_a \mathbf{z} a^t: \quad \bar{\omega}_a \mathbf{z} \bar{a}^* = -\omega_a \mathbf{z} a$$

$$\bar{\omega}^* \omega_3 I_3 = \frac{\varrho \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ \varrho \mathbf{z} \mathbf{1} \end{array} \Big| \begin{array}{c} 0 \\ 0 \end{array} \frac{\omega \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ -\omega \mathbf{z} \mathbf{1} \end{array} \Big| \frac{\varkappa \Gamma \bar{\phi} \mathbf{z} \frac{d}{0} \Big| \frac{0}{\bar{e}}}{\varkappa \Gamma \bar{\phi} \mathbf{z} u^* \Big| 0} \frac{I \mathbf{z} \frac{x/3}{0} \Big| \frac{0}{y}}{0} \Big| \begin{array}{c} 0 \\ I \mathbf{z} x/3 \end{array} \Big| \begin{array}{c} 0 \\ 0 \end{array}$$

$$\frac{0}{0} \Big| \begin{array}{c} 0 \\ \varrho \mathbf{z} \mathbf{1} \end{array} \Big| \frac{\varrho \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{\varphi \Gamma \mathbf{z} \frac{d}{0} \Big| \frac{0}{e}} \Big| \varphi \Gamma \mathbf{z} \begin{bmatrix} u \\ 0 \end{bmatrix} \Big| \frac{\Omega \mathbf{z} \frac{1}{0} \Big| \frac{0}{1}}{0} \Big| \begin{array}{c} 0 \\ 0 \end{array} \frac{I \mathbf{z} \frac{x/3}{0} \Big| \frac{0}{y}}{0} \Big| \begin{array}{c} 0 \\ I \mathbf{z} x/3 \end{array} \Big| \frac{I \mathbf{z} \frac{x/3}{0} \Big| \frac{0}{y}}{0}$$

$$= \frac{\begin{array}{c|c} \varrho \times \omega \mathbf{z} & \begin{array}{c} x/3 \\ 0 \end{array} \\ \hline 0 & y \end{array}}{0} \quad \begin{array}{c} 0 \\ -\varrho \times \omega \mathbf{z} x/3 \end{array} \quad \begin{array}{c|c} \varkappa \Gamma \zeta \tilde{\varphi} \mathbf{z} & \begin{array}{c} dx/3 \\ 0 \end{array} \\ \hline \varkappa \Gamma \zeta \tilde{\varphi} \mathbf{z} & \begin{array}{c} \tilde{u}x/3 \\ 0 \end{array} \end{array} \quad \begin{array}{c} 0 \\ \tilde{e}y \end{array} \\ \hline \begin{array}{c|c} \zeta \varphi \Gamma \mathbf{z} & \begin{array}{c} dx/3 \\ 0 \end{array} \\ \hline \zeta \varphi \Gamma \mathbf{z} & ey \end{array} \quad \begin{array}{c} \zeta \varphi \Gamma \mathbf{z} \\ \left[\begin{array}{c} ux/3 \\ 0 \end{array} \right] \end{array} \quad \begin{array}{c|c} \varrho \times \Omega \mathbf{z} & \begin{array}{c} x/3 \\ 0 \end{array} \\ \hline \varrho \times \Omega \mathbf{z} & y \end{array} \\ \hline \varrho | \omega_3 = \underline{\varrho \omega_3 I_3} = \varrho | \omega \underline{y} + \varrho | \Omega \underline{x + y} : \underline{\Omega} = 0$$

$$\tilde{\varrho} \tilde{\omega}_3 \tilde{I}_3 = \frac{\begin{array}{c|c} \varrho \mathbf{z} & \begin{array}{c} 1 \\ 0 \end{array} \\ \hline 0 & 1 \end{array}}{0} \quad \begin{array}{c} 0 \\ \varrho \mathbf{z} 1 \end{array} \quad \begin{array}{c} 0 \\ 0 \end{array} \\ \hline 0 \quad 0 \quad \begin{array}{c|c} \varrho \mathbf{z} & \begin{array}{c} 1 \\ 0 \end{array} \\ \hline 0 & 1 \end{array}$$

$$\begin{array}{c|c|c|c|c|c|c} \bar{\omega}_a \mathbf{z} & \begin{array}{c} \bar{a} \\ 0 \end{array} & \begin{array}{c} 0 \\ 0 \end{array} & -\omega \mathbf{z} & \begin{array}{c} 0 \\ 0 \end{array} & \begin{array}{c} 0 \\ 1 \end{array} & 0 \\ \hline 0 & \bar{\omega}_a \mathbf{z} \bar{a} & 0 & 0 & I \mathbf{z} & \begin{array}{c} \tilde{x} \\ 0 \end{array} & \begin{array}{c} 0 \\ \tilde{y} \end{array} \\ \hline 0 & 0 & \bar{\omega}_a \mathbf{z} & \begin{array}{c} \bar{a} \\ 0 \end{array} & \begin{array}{c} 0 \\ 0 \end{array} & -\omega \mathbf{z} & \begin{array}{c} 0 \\ 0 \end{array} & \begin{array}{c} 0 \\ 1 \end{array} & 0 & 0 & I \mathbf{z} & \begin{array}{c} \tilde{x} \\ 0 \end{array} & \begin{array}{c} 0 \\ \tilde{y} \end{array} \end{array}$$

$$= \frac{\begin{array}{c|c} \varrho \times \bar{\omega}_a \mathbf{z} & \begin{array}{c} \bar{a} \tilde{x} \\ 0 \end{array} \\ \hline 0 & \begin{array}{c} 0 \\ \tilde{y} \end{array} \end{array} + \varrho \times \omega \mathbf{z} \begin{array}{c} 0 \\ 0 \end{array} \begin{array}{c} 0 \\ \tilde{y} \end{array}}{0} \quad \begin{array}{c} 0 \\ \varrho \times \bar{\omega}_a \mathbf{z} \bar{a} \tilde{x} \end{array} \quad \begin{array}{c} 0 \\ 0 \end{array} \\ \hline 0 \quad 0 \quad \begin{array}{c|c} \varrho \times \bar{\omega}_a \mathbf{z} & \begin{array}{c} \bar{a} \tilde{x} \\ 0 \end{array} \\ \hline \varrho \times \omega \mathbf{z} & \begin{array}{c} 0 \\ 0 \end{array} \end{array} \begin{array}{c} 0 \\ \tilde{y} \end{array}$$

$$\varrho | \tilde{\omega}_3 = \underline{\tilde{\varrho} \tilde{\omega}_3 \tilde{I}_3} = 4\varrho | \bar{\omega}_a \underline{\bar{a} \tilde{x}} - 3\varrho | \omega \underline{\tilde{y}} \Rightarrow 4 \underline{\tilde{x}} \varrho | \bar{\omega}_a \underline{\bar{a}} = \varrho | \omega \underline{y + 3\tilde{y}}$$

$$\Rightarrow 4 \bar{\omega}_a \underline{\bar{a} \tilde{x}} = \omega \underline{y + 3\tilde{y}} \Rightarrow \bar{\omega}_a \underline{\bar{a}} = \omega \Rightarrow \omega_a \underline{a} = \bar{\omega} = -\omega \Rightarrow \omega_a \mathbf{z} a = \omega_a \mathbf{z} a - \omega \mathbf{z} 1/3$$