

$$P_u^{1/2} P_{\dot{w}+\dot{\tilde{w}}}^{-1} P_{\dot{u}}^{1/2} x \mathcal{J}_y^{\ell a/2}$$

$$w = \overbrace{e-z}^\circ \underline{e+z}$$

$$w + \dot{w} = \overbrace{e-\dot{z}}^\circ \underline{e+\dot{z}} + \underline{e+\dot{z}} \overbrace{e-\dot{z}}^\circ = \overbrace{e-\dot{z}}^\circ \overbrace{\underline{e+\dot{z}} \underline{e-\dot{z}} + \underline{e-\dot{z}} \underline{e+\dot{z}}}^\circ \overbrace{e-\dot{z}}^\circ = 2 \overbrace{e-\dot{z}}^\circ \underline{e-\dot{z}} \overbrace{e-\dot{z}}^\circ$$

$$\overbrace{\dot{w}+\dot{w}^*}^\circ = \underline{e-\dot{z}}^\circ \overbrace{e-\dot{z}}^\circ \underline{z}$$

$$u = w + \dot{w} = \overbrace{e-\dot{z}}^\circ \underline{e-\dot{z}} \overbrace{e-\dot{z}}^\circ$$

$$\dot{u} = \dot{w} + \dot{w}^* = \overbrace{e-\dot{z}}^\circ \underline{e-\dot{z}} \overbrace{e-\dot{z}^*}^\circ$$