

5.3.4 Analyze $\dot{z} = az + bz$.

$$\dot{z} = az$$

$$\dot{z} = bz.$$

$$A = \begin{pmatrix} 0 & a \\ b & 0 \end{pmatrix}$$

$$\bar{z} = 0$$

$$\Delta = -ab > 0.$$

$$\tau^2 - 4\Delta = -4ab$$

$$\lambda_{1,2} = \frac{0 \pm \sqrt{16\tau^2 - 4ab}}{2} = \pm \sqrt{4\Delta - \tau^2/2}$$

$$\therefore \alpha = \tau/2 \quad w = \sqrt{4\Delta - \tau^2/2}.$$

$$\therefore \alpha = 0.$$

