

$$\left\{ \begin{aligned} [1](,) &= -2[2][1](,) + \frac{8}{9} (|[1](,)|^2 + |[2](,)|^2) \quad [1](,)[2](,) = -2[2][2](,) + \frac{8}{9} (|[1](,)|^2 + |[2](,)|^2) \quad [2](,) \end{aligned} \right.$$

$$(1) [j](\cdot) j = 1, 2$$

$$\{[1] = [2][1]t + 2(|[1]|^2 + |[1]|^2)[1][2] = [2][2]t + 2(|[1]|^2 + |[2]|^2)[2]$$

(2)  $of_{variables_N}LSE, herereportedforconvenience[j] =$

$$\frac{[j]}{T_0} \sqrt{P}, \quad =$$

$$\frac{-P}{\frac{8}{9}T_0^2} = (3)$$

$$2T_0^2/||$$

$$T_{\begin{smallmatrix} 0 \\ \text{??} \\ \text{??} \end{smallmatrix}}$$

$$[1, 2](t)$$

$$(\mathbf{A} + \mathbf{B})$$

$$\begin{pmatrix} -2^2 \mathbf{A} - 2\mathbf{B} + \mathbf{C} \\ (-)_{00} \end{pmatrix}$$

$$\begin{pmatrix} 0 \\ 0 \\ 0 \end{pmatrix} [1] [2]$$

$$\overline{[1]^*00}$$

$$\frac{[2]^*00}{([1]^2 + [2]^2)[1][2]}$$

$$\begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix}^* \begin{bmatrix} 1 \\ 2 \end{bmatrix} -$$

$$\begin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}^* \begin{bmatrix} 1 \\ 2 \end{bmatrix} -$$

$$\begin{array}{c} \left[ \begin{array}{c} \mathbb{Z} \\ [1, 2] \end{array} \right] 0 \\ t \left| \infty \right| \end{array}$$

$$timeare[?] :$$

$$0e^{-}; \rightarrow$$

$$(0)0$$

$$\begin{array}{c} 10' \\ 01e \rightarrow \\ -\infty \rightarrow \\ (0)0 \end{array}$$

$$\begin{pmatrix} 0 \\ 1 \end{pmatrix} \rightarrow \begin{pmatrix} 0 \\ 0 \end{pmatrix}$$

$$0 \rightarrow 0e^- \rightarrow$$

$$\left\{ \begin{array}{l} \{ \\ \{ \\ \{ \end{array} \right\}, \left\{ \begin{array}{l} \{ \\ \{ \\ \{ \end{array} \right\}$$

$$\begin{bmatrix} 1, \\ 2 \times \\ 2 \\ -1 \end{bmatrix} \in$$