

$$e = \begin{pmatrix} \sqrt{2}:0 \end{pmatrix} \in \begin{cases} \mathbb{K}^{\mathfrak{U}} H \\ \mathfrak{U} \mathbb{K}^{1+m} \end{cases} = \frac{(\eta:h) \in \begin{cases} \mathbb{K} \times H \\ \mathbb{K}^{1+m} \end{cases}}{\left[ \begin{array}{ccc|c} 1 & \eta & h & -\frac{\eta^2 + hh^t}{2} \\ \hline 0 & 1 & 0 & 0 \\ 0 & 0 & -1 & 0 \\ 1 & 0 & 0 & 0 \end{array} \right] \left[ \begin{array}{c|cc} 0 & 0 & -1 \\ \hline 0 & 0 & 0 \\ -1 & 0 & 0 \end{array} \right] \left[ \begin{array}{c} 1 \\ \eta^* \\ h^* \\ -\frac{\eta^2 + hh^t}{2} \end{array} \right]} = \eta\ddot{\eta} - h\dot{h} + \Re(\eta^2 + hh^t) > 0$$

$$(\eta:h) S_e = (\eta:h) \text{ Int } \mathfrak{U} = \frac{2(\eta:-h)}{\eta^2 + hh^t}$$