



$$f(t, v) = g(t) + v g'(t)$$

$$f_t(t, v) = g' + v g''$$

$$f_v(t, v) = g'$$

$$\begin{aligned} [g' + v h', h, h'] &= \\ &= [g', h, h'] + v [h', h, h'] \\ &= 0 \end{aligned}$$

$$F(u_1, u_2)$$

$$\underbrace{h_{11}}_{=0} du_1^2 + \underbrace{2h_{12}}_{=0} du_1 du_2 + h_{22} du_2^2 = 0$$

$du_1 = 0$ asympt. solution

$$K = \frac{h_{11}h_{22} - h_{12}^2}{\dots} = 0$$

⇓

$$h_{22} = 0$$

$$\Rightarrow h_{12} = 0$$

$$\bullet (u_1, f_2) = 0 / \partial u_2$$

$$(u_{2,1}, f_1) + \underbrace{(u_1, f_{2,2})}_{h_{12} = 0} = 0$$

$$\bullet (u_1, f_2) = 0 / \partial u_1$$

$$(u_{1,1}, f_2) + \underbrace{(u_1, f_{2,1})}_{h_{12} = 0} = 0$$