

$y_6$ 

$$f(x_1, x_2) = (x_1 - \cos(x_2))^2$$

$$\dot{y}_5 = 2\dot{y}_4 y_4$$

 $y_5$ 

$$y_4^2$$

$$\dot{y}_4 = \dot{y}_1 - \dot{y}_3$$

 $y_4$ 

$$y_1 - y_3$$

$$\dot{y}_3 = -\dot{y}_2 \sin(y_2)$$

 $y_1$ 

$$\cos(y_2)$$

 $y_3$  $\dot{y}_2$ 

Mode tangent

 $y_1$  $x_1$  $x_2$  $y_2$