



$0 < \lambda_1 < 1 < \lambda_2$

$$Df(0,0) = \begin{bmatrix} 1-k & 1 \\ -k & 1 \end{bmatrix}$$

$(|\lambda_1| = |\lambda_2| = 1$

$\lambda_2 < -1 < \lambda_1 < 0$

$\lambda_1 \lambda_2 = \text{Det}(Df(0,0)) = 1, \quad \lambda_1 + \lambda_2 = \text{Tr}(Df(0,0)) = 2-k$