Double fold (Eq. 3)	Fold–Hopf (Eq. 4)	Hopf–fold (Eq. 5)	Double Hopf (Eq. 6)
Leading system			
$\phi_c = \pm 0.19$ (fold)	$\phi_c = \pm 0.38$ (fold)	$\phi_c = 0$ (Hopf)	$\phi_c = 0$ (Hopf)
Bistable for	Bistable for	Oscillatory for	Oscillatory for
$\lvert\phi\rvert < \sqrt{\frac{-4a_1^3 a_2^3}{27a_1^4}}$	$\lvert\phi\rvert < \sqrt{\frac{-4a_1^3 a_2^3}{27a_1^4}}$	$\phi > 0$	$\phi > 0$
(if $a_1 < 0, a_2 > 0$)	(if $a_1 < 0, a_2 > 0$)	(if $a_1 b_1 < 0$)	(if $a_1 b_1 < 0$)
Coupling			
$\gamma = 0.48x$	$\gamma = -0.1 + 0.12x$	$\gamma = 0.05 + 0.5x$	$\gamma = -0.05 + 2x$
Following system			
$\gamma_c = \pm 0.54$ (fold)	$\gamma_c = 0$ (Hopf)	$\gamma_c = \pm 0.38$ (fold)	$\gamma_c = 0$ (Hopf)
Bistable for	Oscillatory for	Bistable for	Oscillatory for
$\lvert\gamma\rvert < \sqrt{\frac{-4b_1^3 b_2^3}{27b_1^4}}$	$\gamma > 0$	$\lvert\gamma\rvert < \sqrt{\frac{-4c_1^3 c_2^3}{27c_1^4}}$	$\gamma > 0$
(if $b_1 < 0, b_2 > 0$)	(if $b_1 c_1 < 0$)	(if $c_1 < 0, c_2 > 0$)	(if $c_1 d_1 < 0$)
Parameters			
$a_1 = -0.5$	$a_1 = -1$	$a_1 = 0.05; a_2 = 1$	$a_1 = 0.04; a_2 = 2$
$a_2 = 0.5$	$a_2 = 1$	$b_1 = -0.05; b_2 = 1$	$b_1 = -0.04; b_2 = 2$
$b_1 = -0.5$	$b_1 = b_2 = 1$	$c_1 = -1$	$c_1 = 0.4; c_2 = 1$
$b_2 = 1.0$	$c_1 = -1; c_2 = 1$	$c_2 = 1$	$d_1 = -0.4; d_2 = 1$