

Nonlinear System (Two Coupled Neurons)

$$\dot{v}_1 = -5v_1 + 17 \tan^{-1}(v_1) - 13 \tan^{-1}(v_2)$$

$$\dot{v}_2 = -v_2 + 4 \tan^{-1}(v_1) - 5 \tan^{-1}(v_2)$$

