

Nonlinear System (Two Coupled Neurons)

$$\begin{aligned}\dot{v}_1 &= -5v_1 + 17 \tan^{-1}(v_1) - 13 \tan^{-1}(v_2) \\ \dot{v}_2 &= -v_2 + 4 \tan^{-1}(v_1) - 5 \tan^{-1}(v_2)\end{aligned}$$

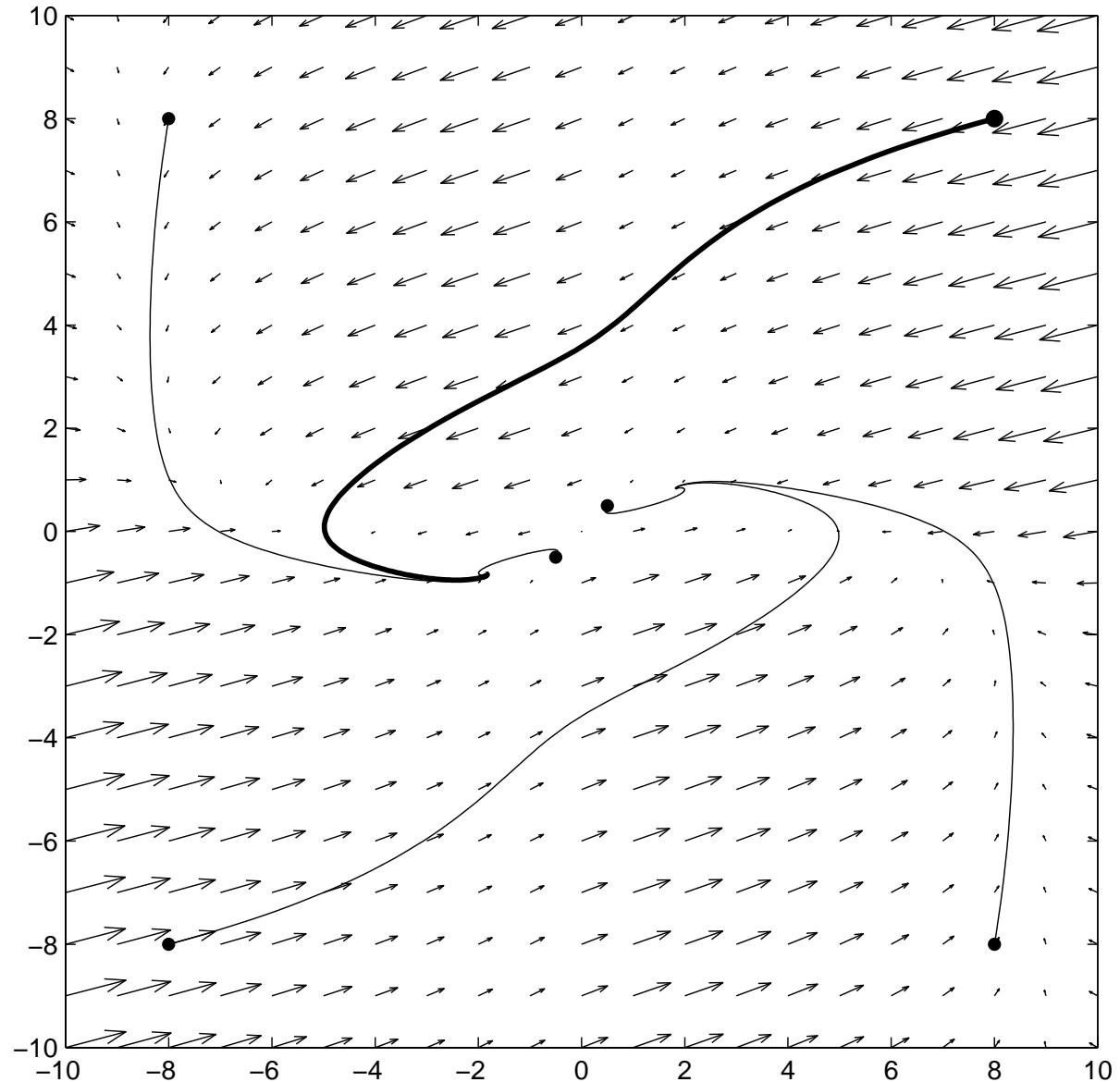


Figure 1: Direction field and sample trajectories for two neuron system.