

# Linear System

$$\begin{aligned}\dot{v}_1 &= -.5v_1 + .2v_2 \\ \dot{v}_2 &= -.3v_1 + -.4v_2\end{aligned}$$

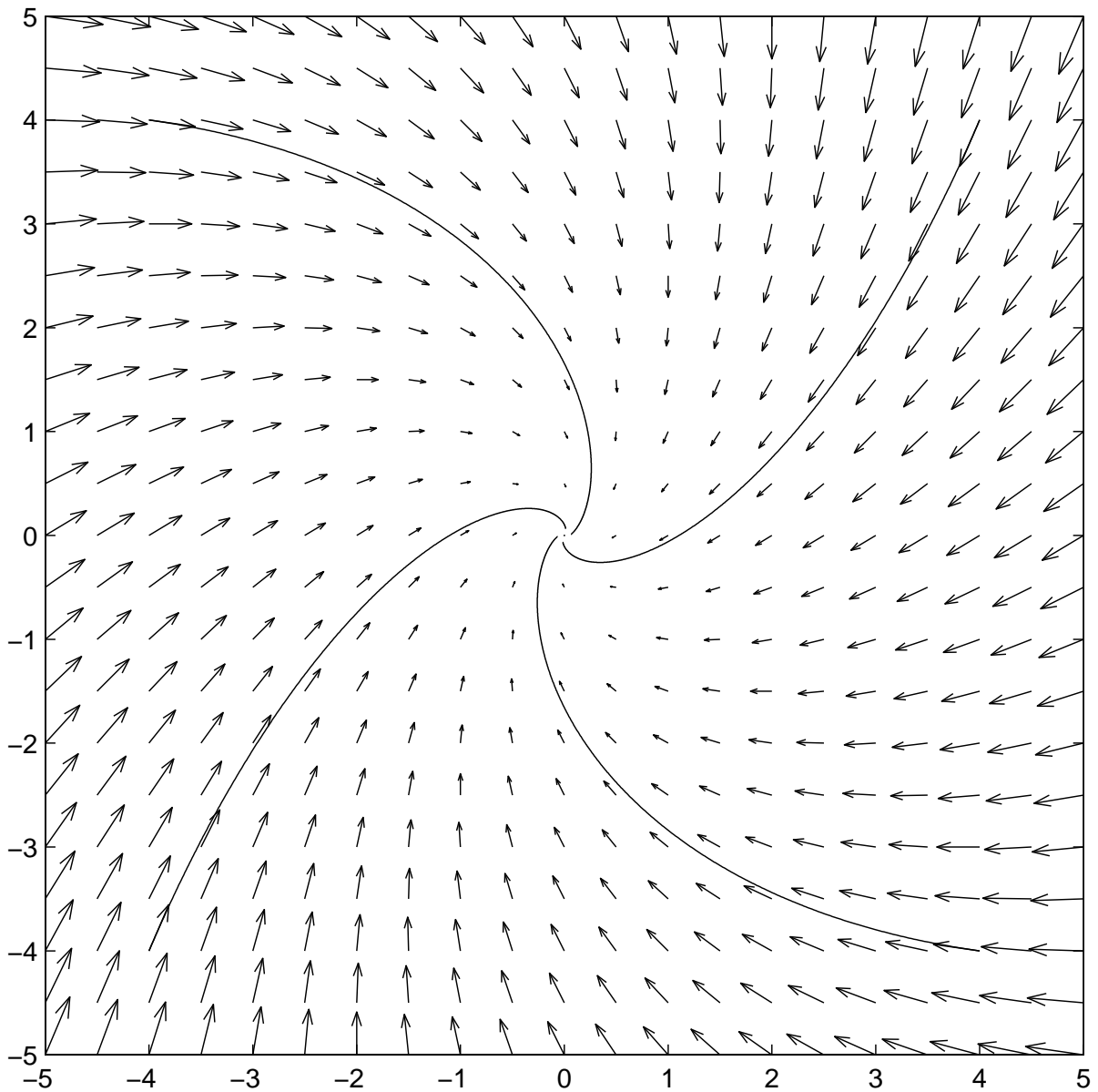


Figure 1: Direction field and sample trajectories for linear system with  $(a, b, c, d) = (-.5, .2, -.3, -.4)$ .