

Figure 1: (Top) Learned vector fields and trajectories on the time interval  $t \in [0, 10]$ . (Bottom) Eigenvalues of the vector fields along these trajectories.

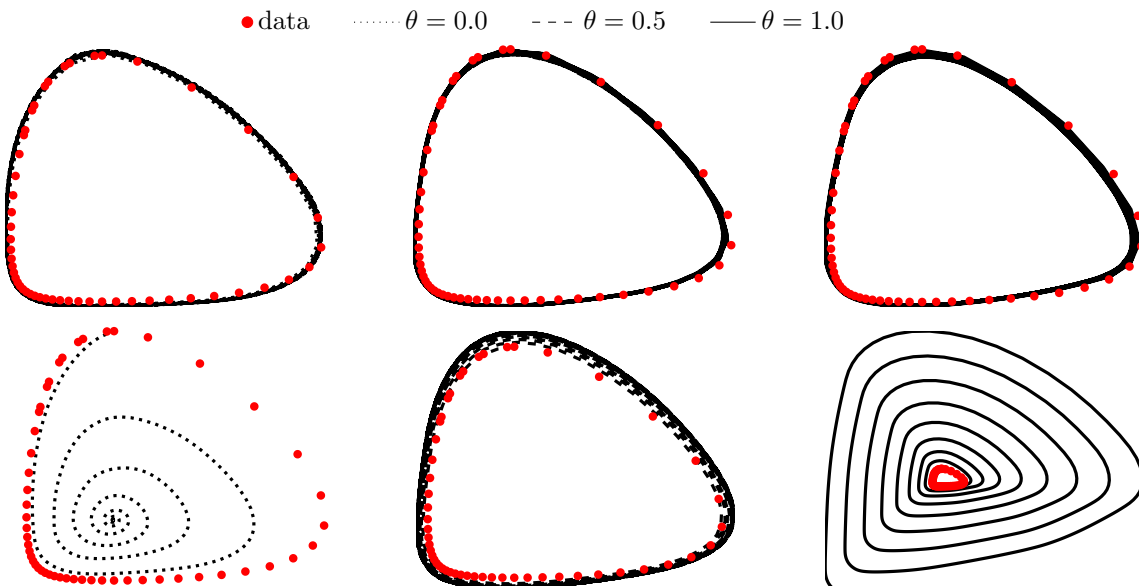


Figure 2: (Top) A single trajectory generated by three trained implicit residual networks on the time interval  $t \in [0, 200]$ ; (Bottom) continuous-time trajectory generated by the learned vector fields of these residual networks on the same time interval.