#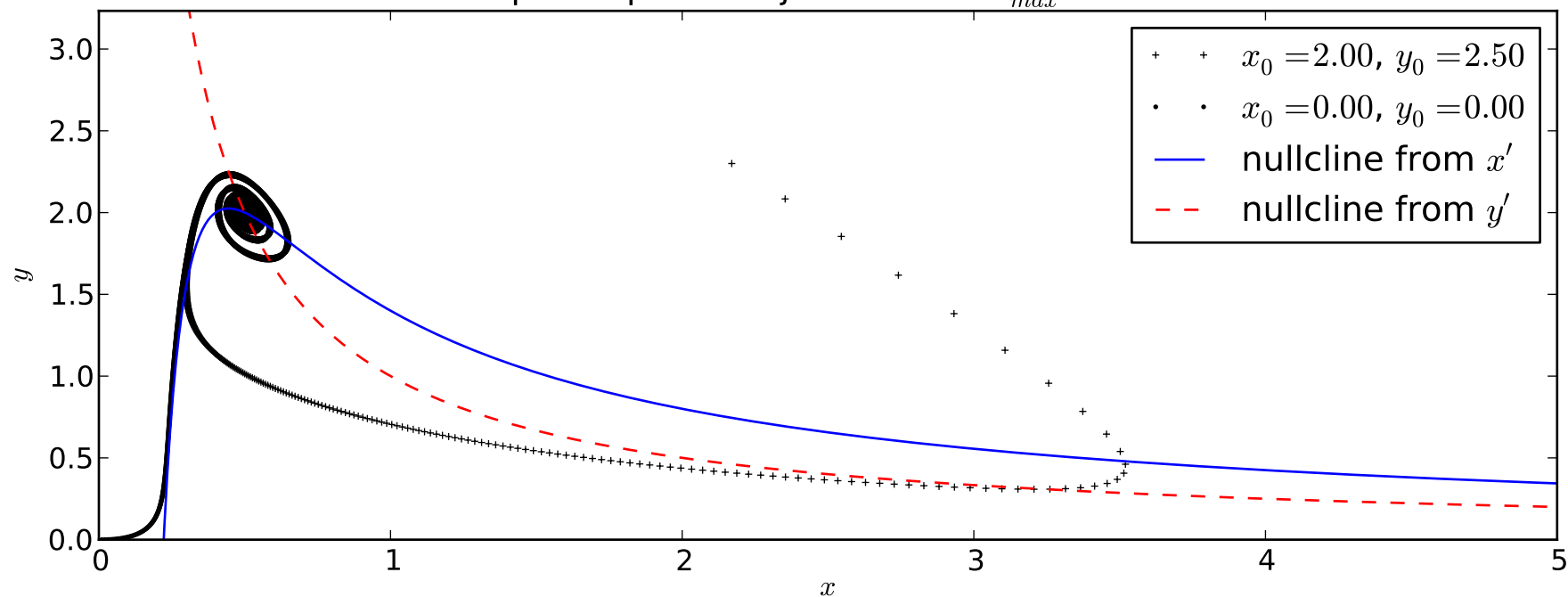 Problem 1: Stable Focus, with the parameters $\mu = 0.40$, $\alpha = 0.80$, and the eigenvalues -0.025 +0.447 j ; -0.025 -0.447 j

phase-plane trajectories for $\tau_{max} = 200$

Legend:
- $x_0 = 2.00$, $y_0 = 2.50$
- $x_0 = 0.00$, $y_0 = 0.00$
- nullcline from x'
- nullcline from y'

Concentrations over time starting from $x_0 = 0.0$, $y_0 = 0.0$

- x
- y

τ (tick marks are separated by periods $T = 2\pi/\omega = 14.1$, as predicted by the linearization)