Steady States in 2D gLV Equations

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Nondimensionalized 2D gLV equations are

$$\frac{dx_a}{dt} = x_a(\mu_a - x_a + M_{ab}x_b) \tag{1}$$
$$\frac{dx_b}{dt} = x_b(\mu_b - x_b + M_{ba}x_a) \tag{2}$$

and has three steady states at $(1,0)$,$(0,\mu_b)$, and $(\frac{1-M_{ab}\mu_b}{1-M_{ab}M_{ba}}, \frac{\mu_b - M_{ba}}{1-M_{ab}M_{ba}})$. Taking $\mu_b = 1$, the following graph summarizes the stability of these three steady states.

Figure 1: Setup for the measurement