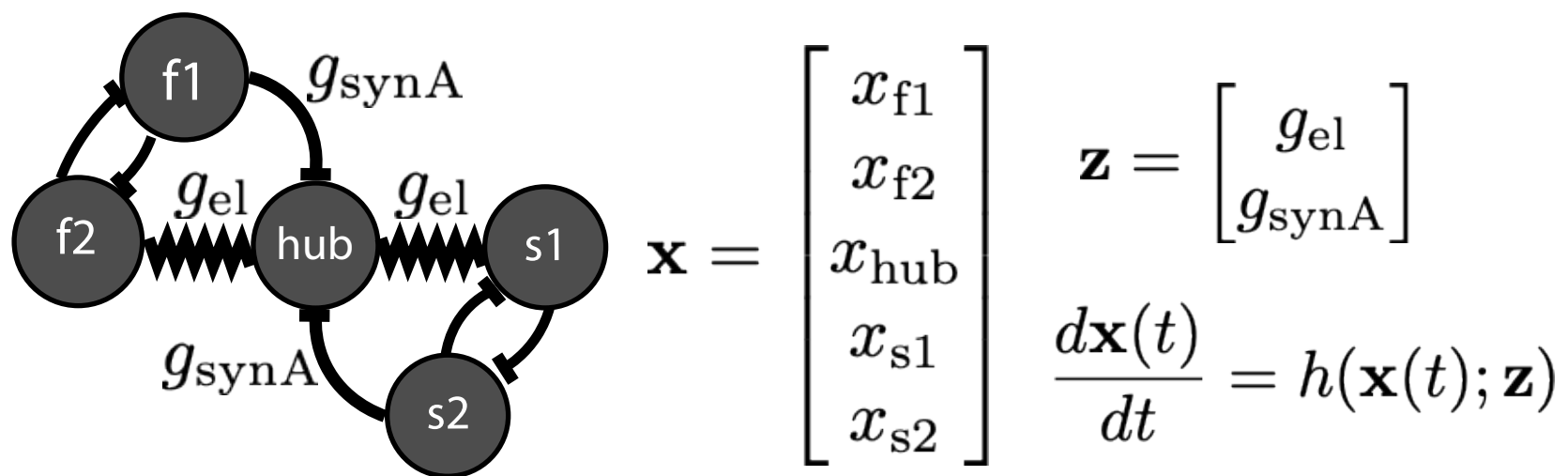
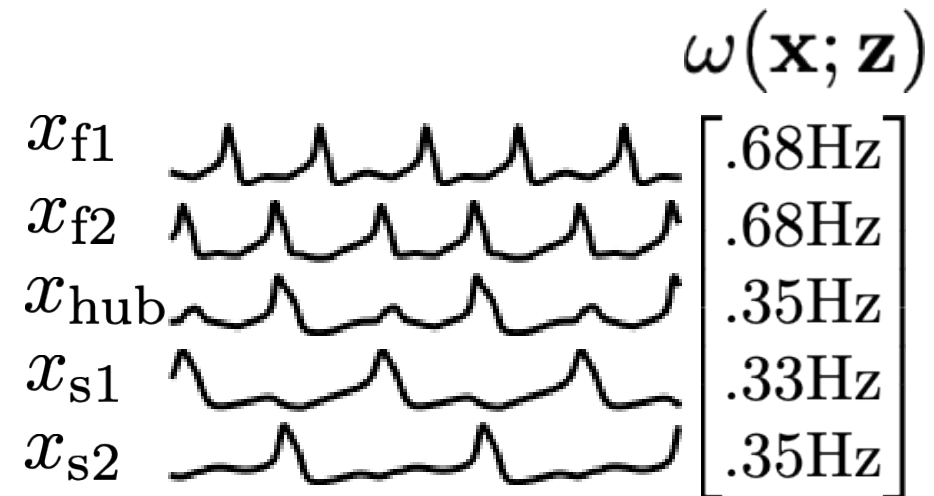


**A****Biological model:**

STG

**B****Emergent property statistic:**

spiking frequency

**C****Emergent property:**

intermediate hub frequency

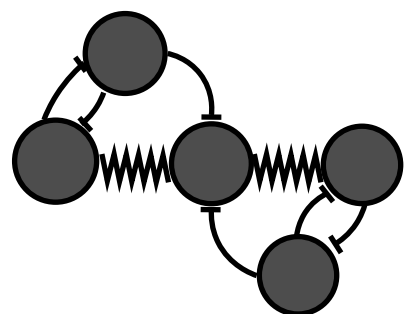
$$\mathbb{E}_{\mathbf{z}, \mathbf{x}} [\omega_{\text{hub}}(\mathbf{x}; \mathbf{z})] = 0.55\text{Hz}$$

$$\text{Var}_{\mathbf{z}, \mathbf{x}} [\omega_{\text{hub}}(\mathbf{x}; \mathbf{z})] = 0.025^2\text{Hz}^2$$

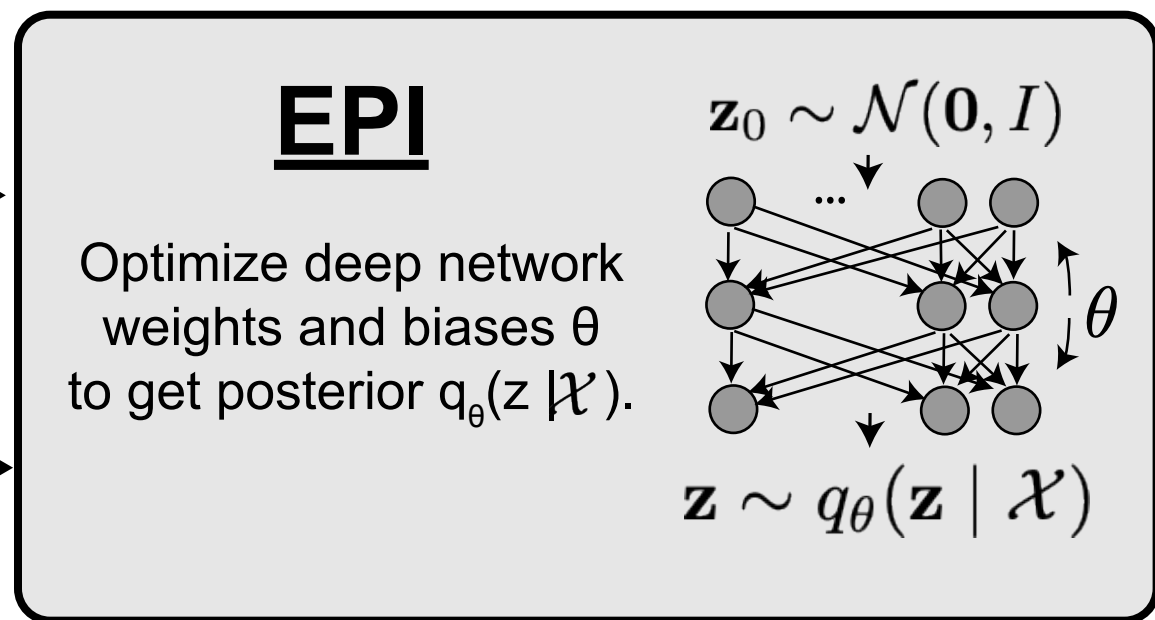
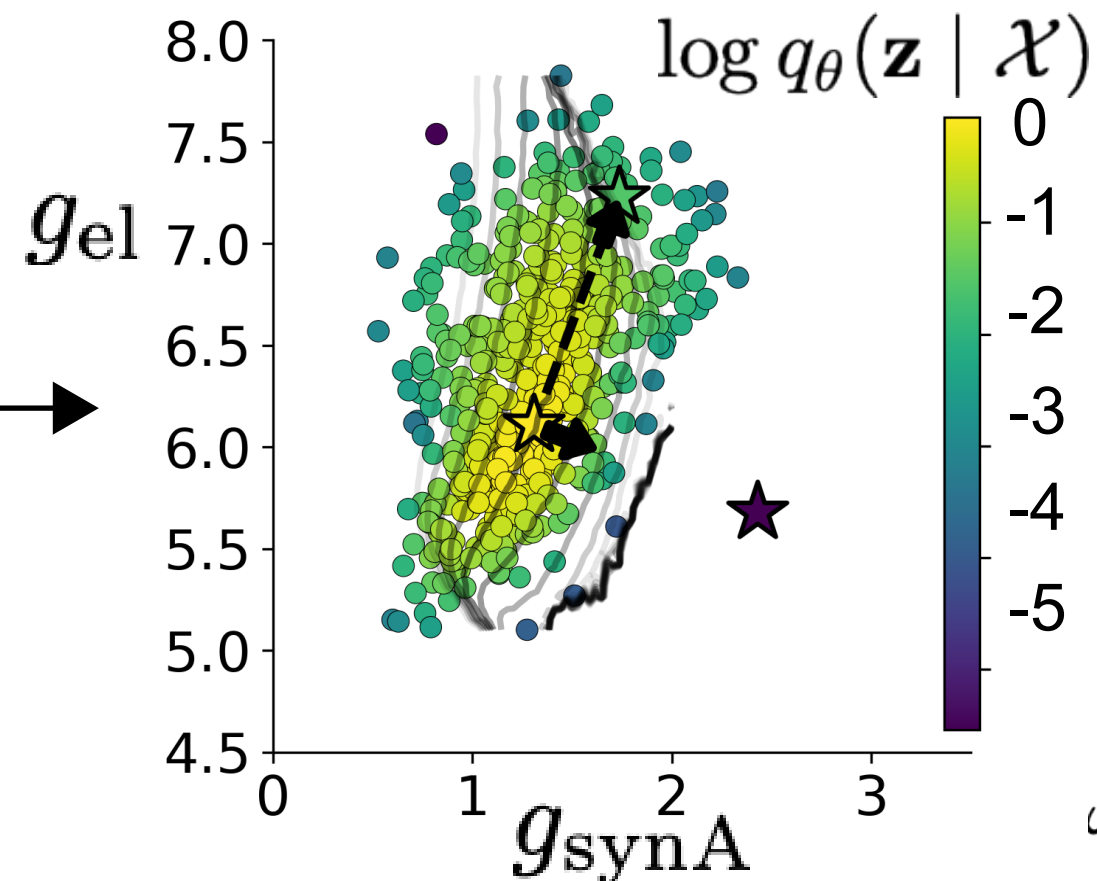
$x_{\text{hub}}$

**D****Emergent property inference**

biological model



emergent property

**E****EPI posterior****F****Posterior simulations**