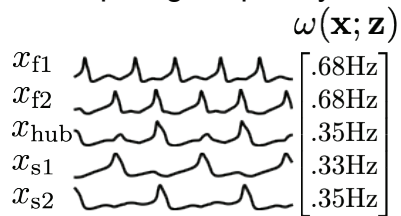


B Emergent property statistic: spiking frequency

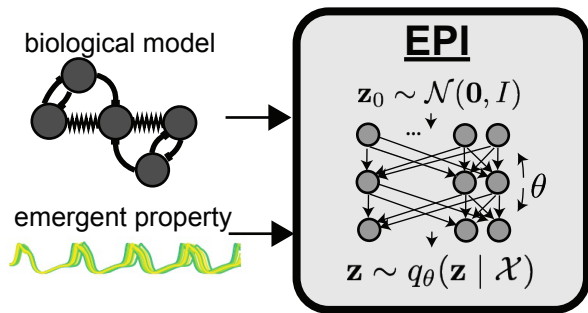


C Emergent property: intermediate hub frequency

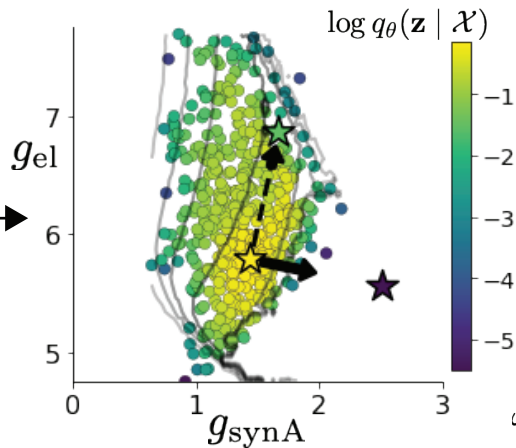
$$\mathbb{E}_{\mathbf{z}, \mathbf{x}} [\omega_{hub}(\mathbf{x}; \mathbf{z})] = 0.55\text{Hz}$$

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

D Emergent property inference



E EPI posterior



F Posterior simulations

