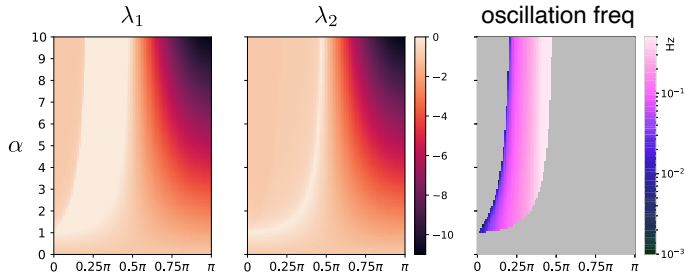
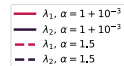
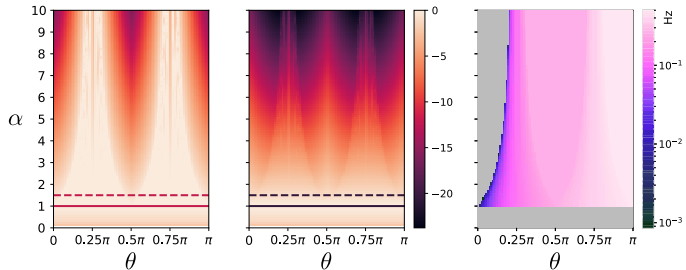


continuous time



$$\tanh \left(\alpha \begin{bmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{bmatrix} \mathbf{x}_t \right) = \begin{cases} \dot{\mathbf{x}} \\ \mathbf{x}(t+1) - \mathbf{x}(t) \end{cases}$$

discrete time



$\alpha = 1 + 10^{-3}$ vs $\alpha = 1.5$

