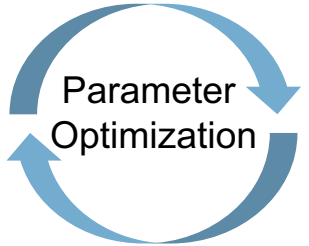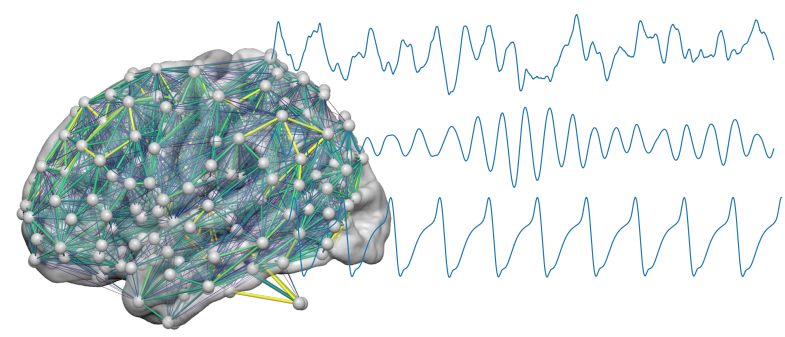# Brain Network Model

$$\psi(x,t) = \boxed{N(\psi(x,t))} + \boxed{\int\limits_{local} dx' g(x-x') S(\psi(x',t))} + \boxed{\int\limits_{global} dx' G(x,x') S(\psi(x', t - \frac{|x-x'|}{v}))} + \boxed{I_{ext}(x,t)}$$

Simulated Neural Population Activity

Parameter Optimization

Empirical data features