

P3 { Toy Model of Conscious Decision-Making

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Hypothesis

The (q) component of the field encodes mental state oscillations. Decision-making can be modeled as bifurcation in a low-dimensional system governed by free energy minimization.

Model Idea

- Use 1D reduced dynamics: $(q) \sim (t)$
- Introduce potential landscape $F(\cdot)$ with bistable points.
- Evolve using Fokker-Planck-like dynamics:

$$\frac{\partial (q; t)}{\partial t} = -\frac{\partial}{\partial q} (\cdot) + D \frac{\partial^2}{\partial^2}$$

Goal

Show this reproduces "choice" dynamics as spontaneous symmetry breaking or collapse.