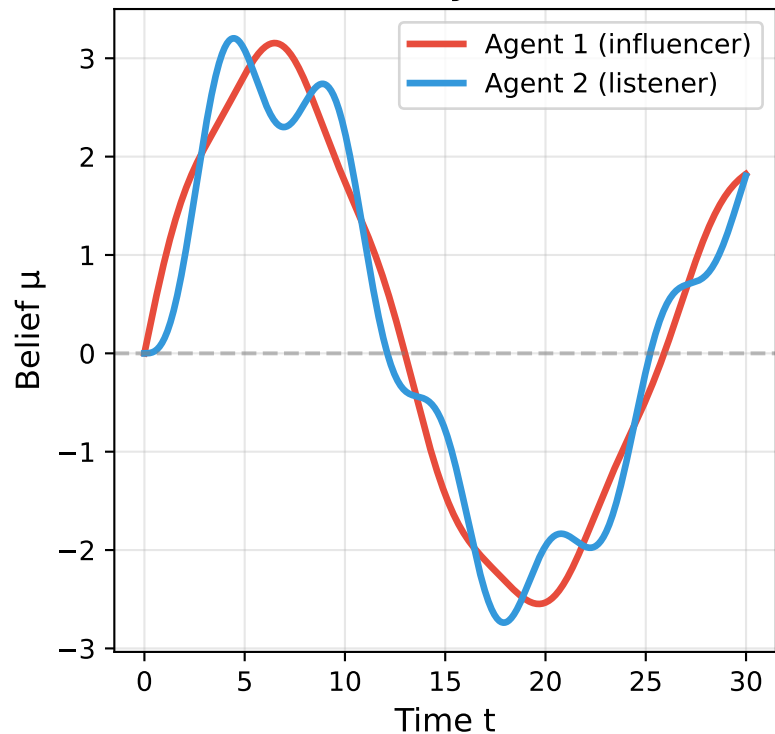
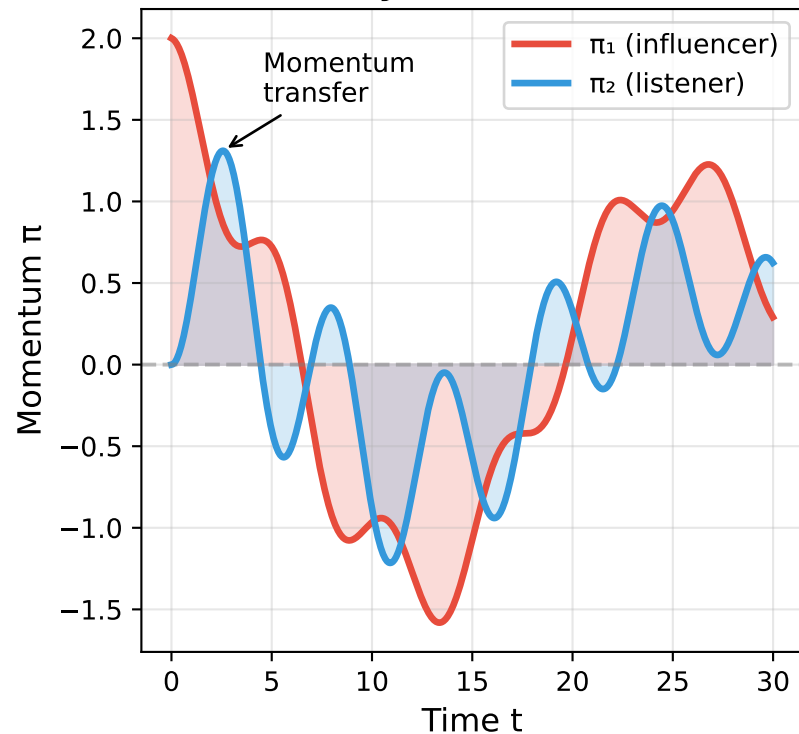


Two-Agent Momentum Transfer: The Recoil Effect

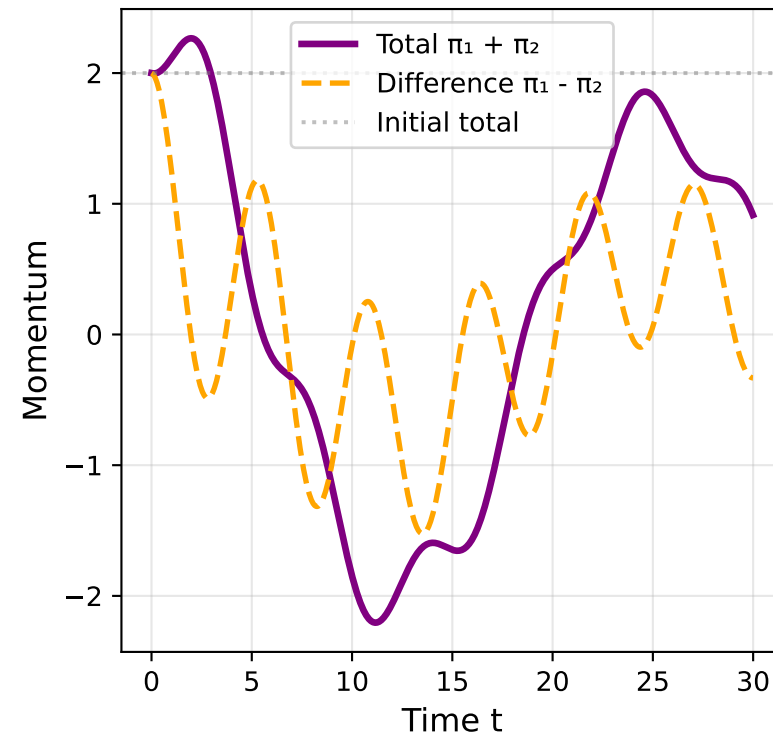
Belief Trajectories



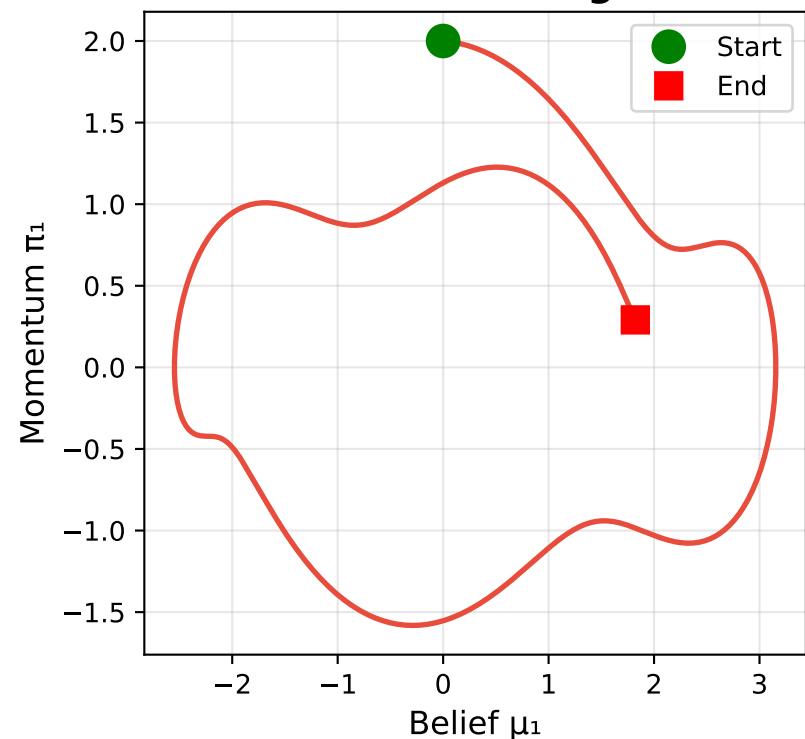
Momentum Trajectories (Recoil Effect)



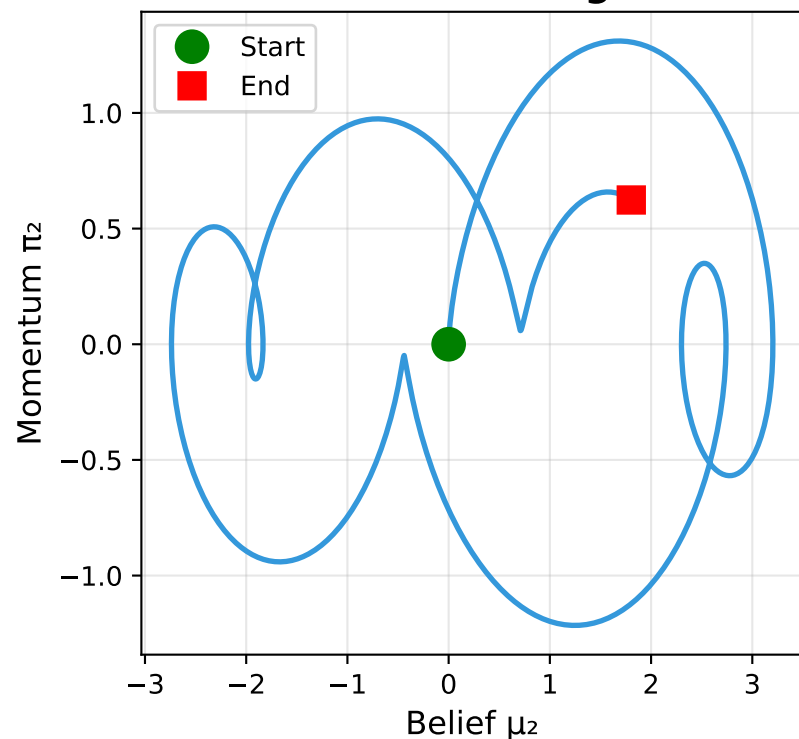
Conservation Check



Phase Portrait: Agent 1



Phase Portrait: Agent 2



MOMENTUM TRANSFER ANALYSIS

Initial State:

- Agent 1: $\pi_1(0) = 2.00$ (moving)
- Agent 2: $\pi_2(0) = 0.00$ (at rest)

Key Results (Eq. 48-52):

- Agent 1 momentum drop: $\Delta\pi_1 = 3.58$
- Agent 2 peak momentum: $\pi_{2_max} = 1.31$
- Transfer efficiency: 65.5%

RECOIL EFFECT CONFIRMED:

The influencer's momentum decreases as momentum flows to coupled partner.

Momentum Current (Eq. 52):

$$J_{k \rightarrow i} = \beta_{ik} \tilde{\Lambda}_k (\tilde{\mu}_k - \mu_i)$$

$$\text{Precision ratio: } \Lambda_1/\Lambda_2 = 2.00$$