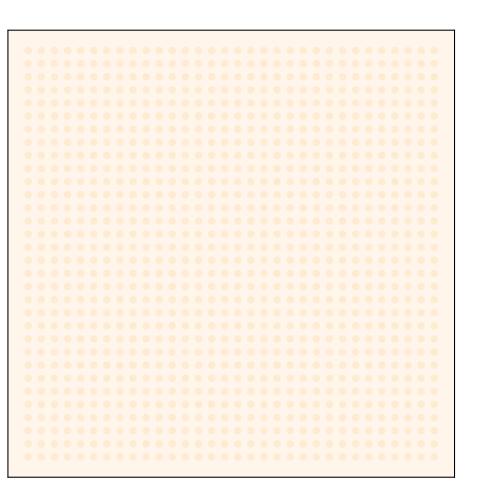
1. Probability path  $p_t$  s.t.  $p_0 = p$ ,  $p_1 = q$ .

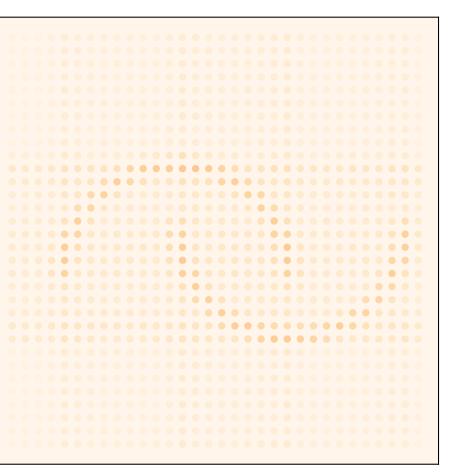
2. Find a velocity  $u_t$  that generate:  $X_t \sim p_t$ .

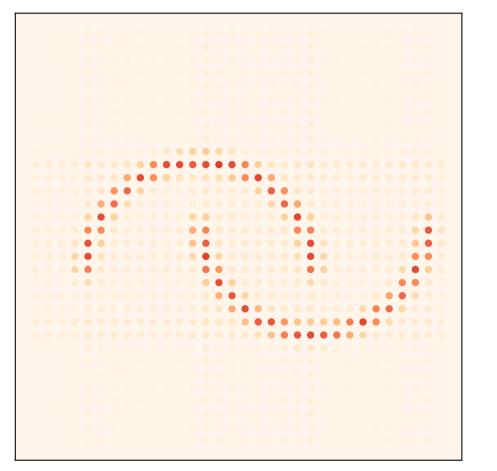
3. Train a model  $u_t^{\theta}$ .

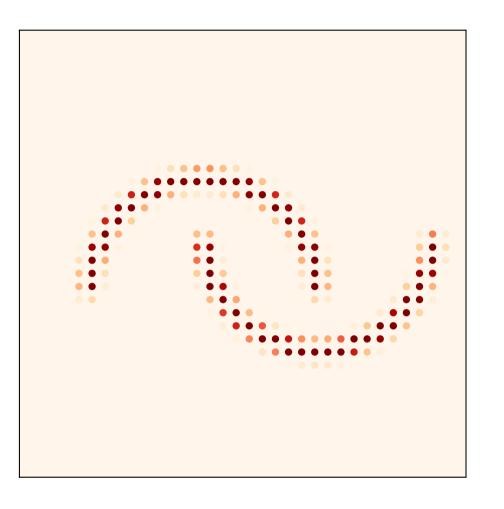
4. Sample  $X_1 \sim p_1$  using the trained model  $u_t^{\theta}$ .

# Discrete Flow Matching Recipe







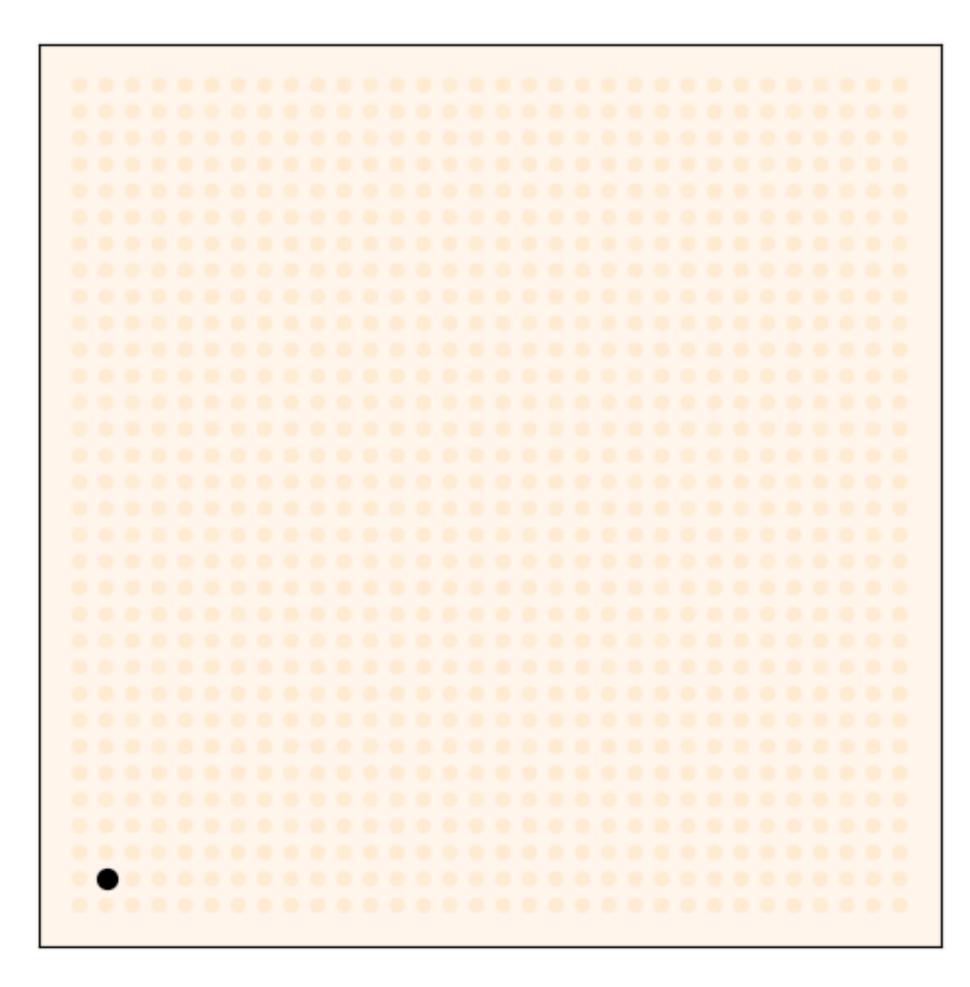


90

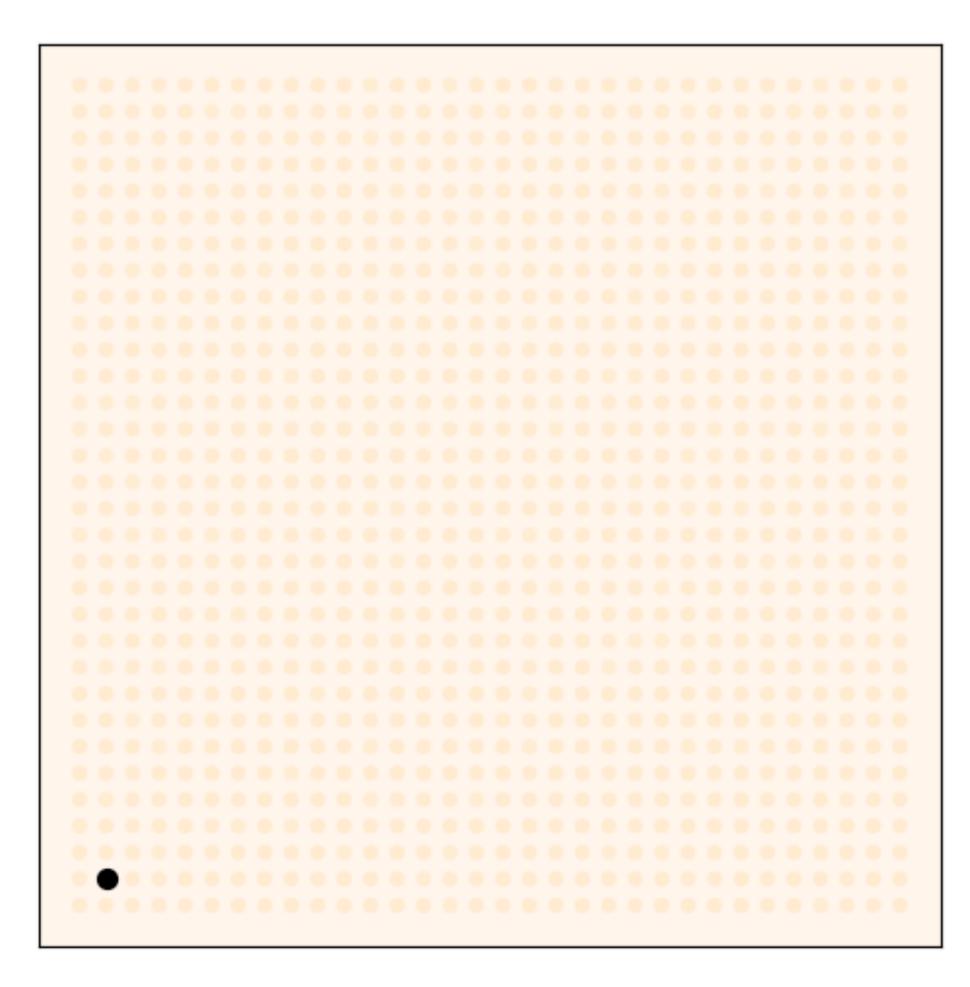
p

*y*<sub>1</sub>

#### t = 0.000



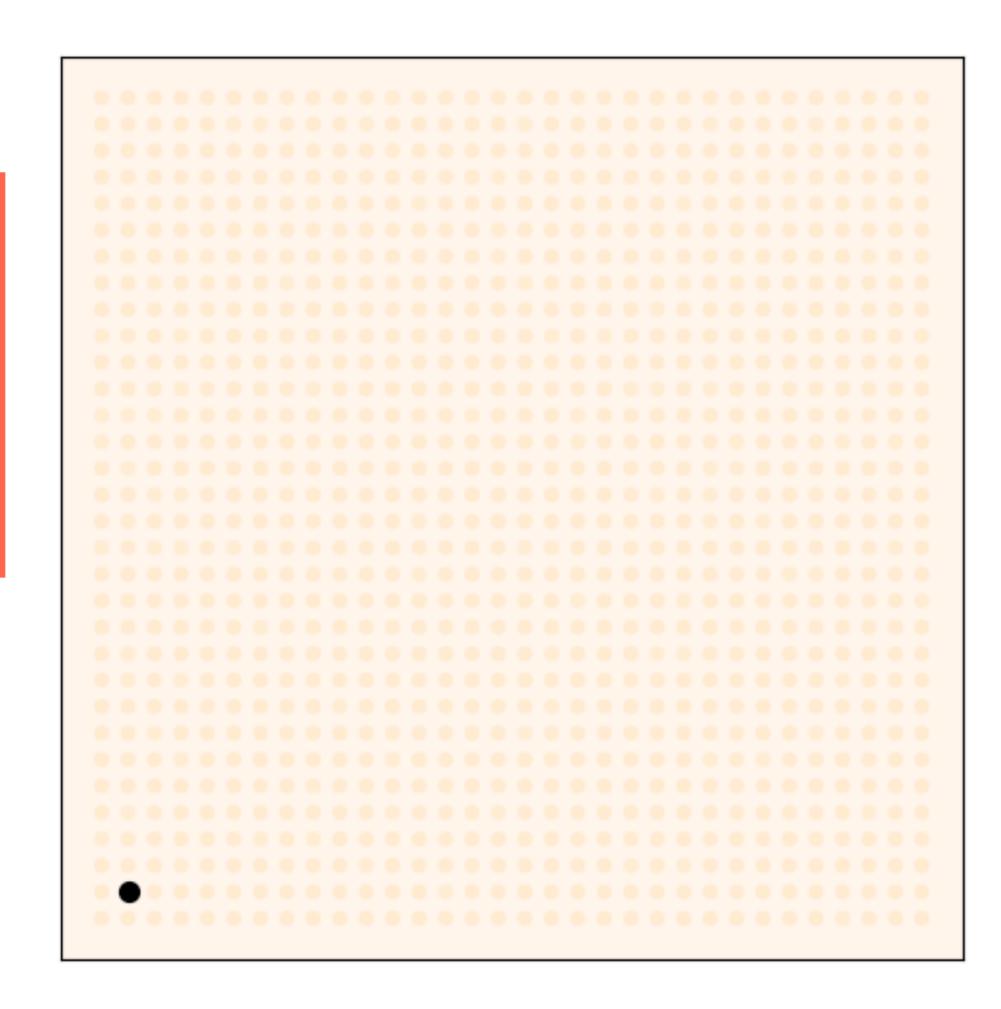
#### t = 0.000



# Discrete Flow Matching Recipe

t = 0.000

- 1. Probability path  $p_t$  s.t.  $p_0 = p$ ,  $p_1 = q$ .
- 2. Find a velocity  $u_t$  that generate:  $X_t \sim p_t$ .
- 3. Train a model  $u_t^{\theta}$ .
- 4. Sample  $X_1 \sim p_1$  using the trained model  $u_t^{\theta}$ .



### Goal

Find kinetic optimal velocities for arbitrary path.