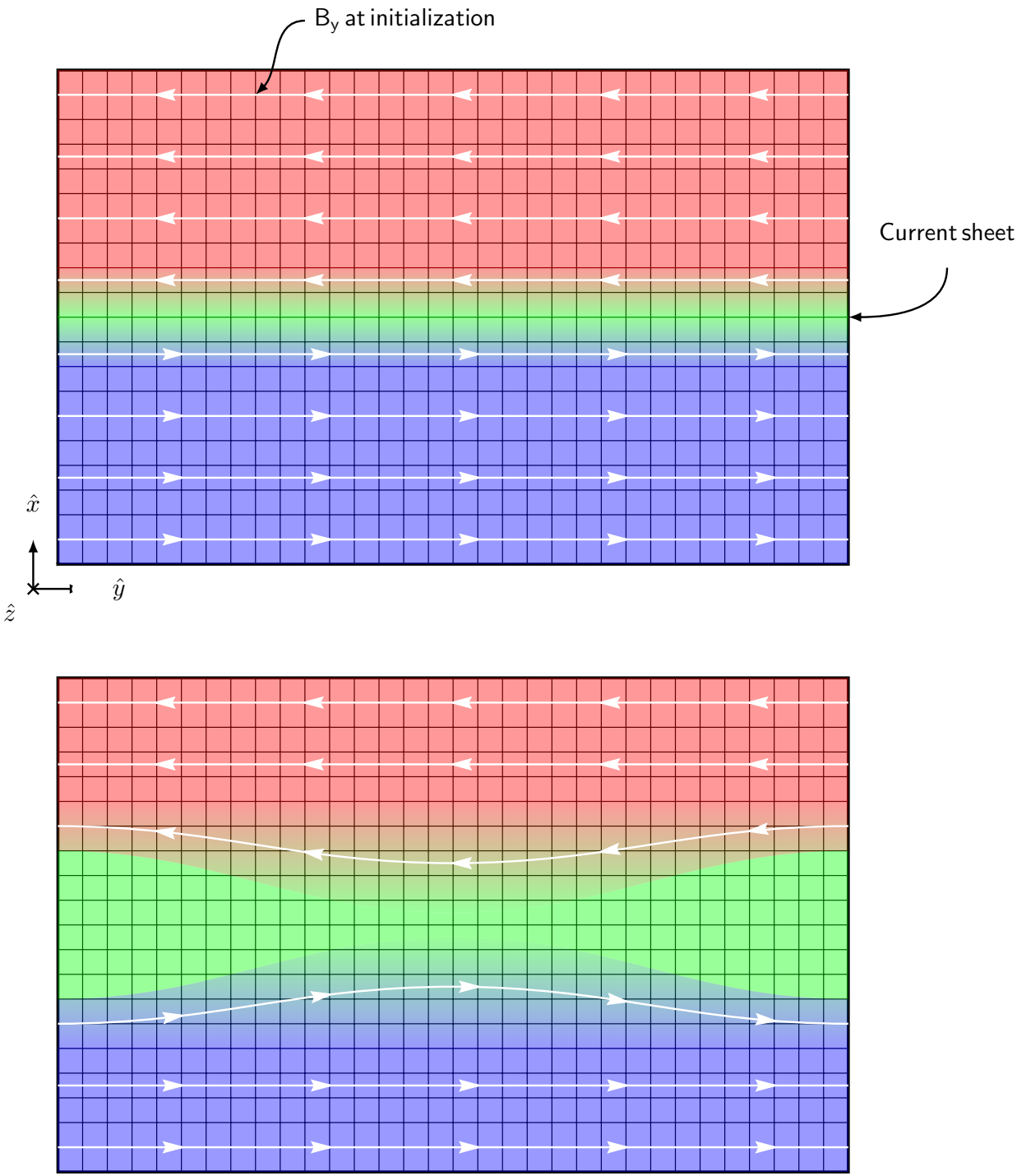
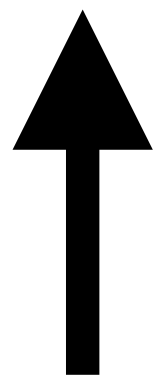
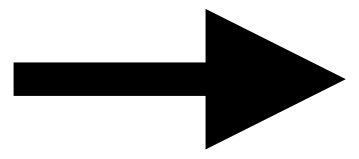
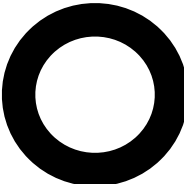
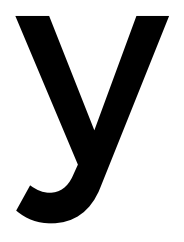

B_y at initialization
Current sheet
$\hat{x}$
$\hat{y}$
$\hat{z}$

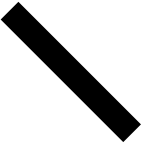
Current sheet

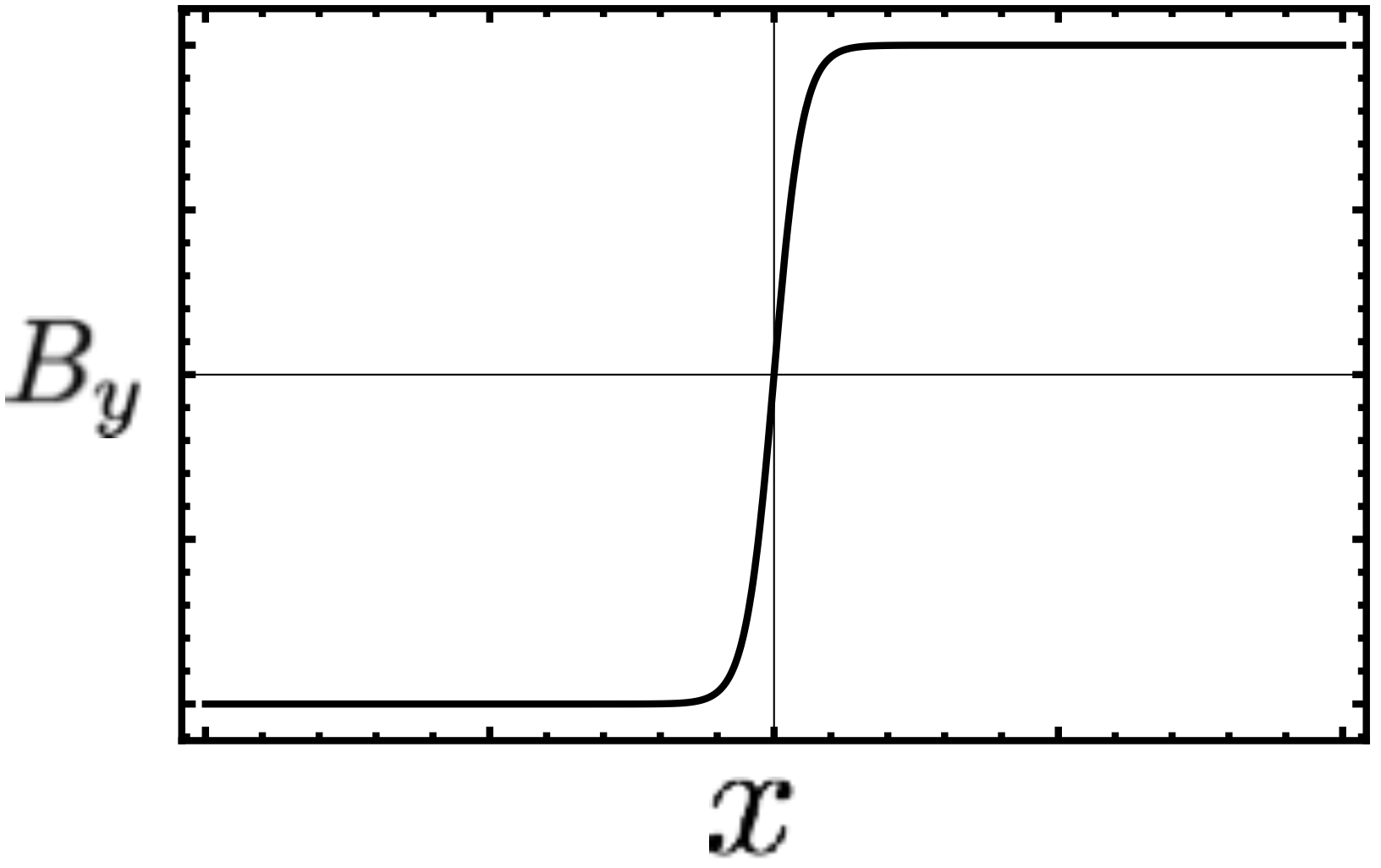




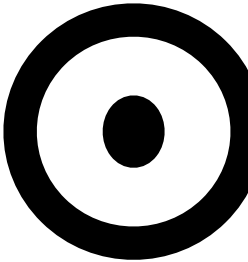


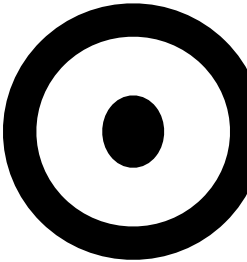


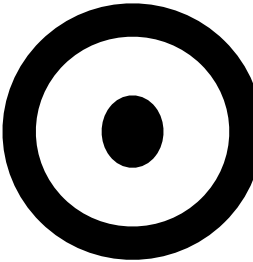


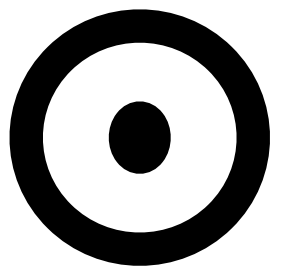


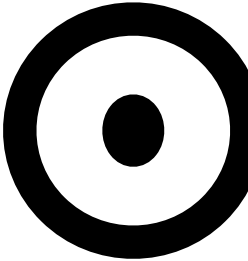
$$\mathbf{B} = B_0 \tanh(x/L)\mathbf{e}_y$$

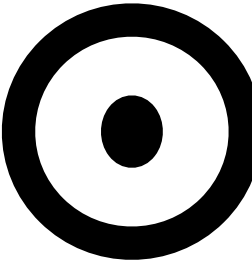


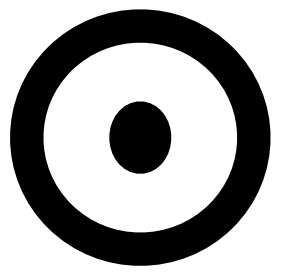


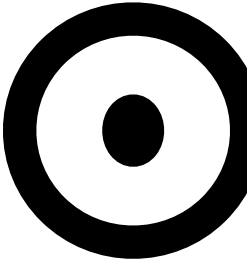


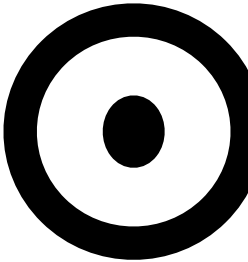


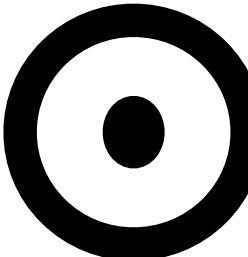


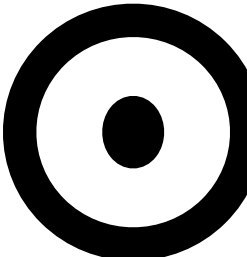


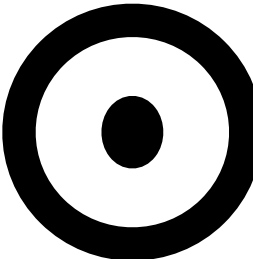


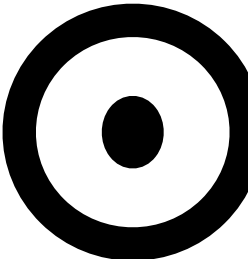


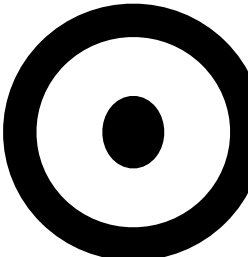


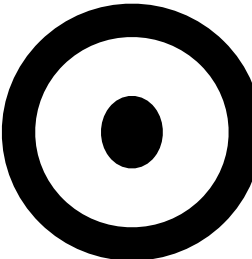


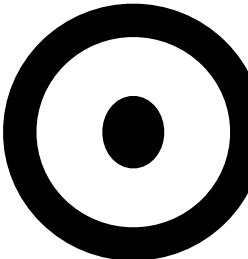


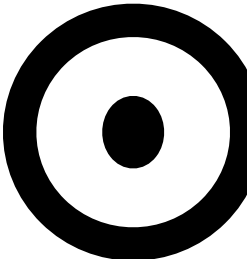


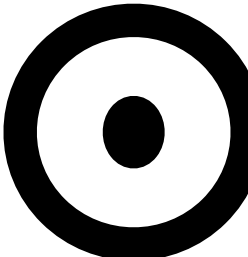






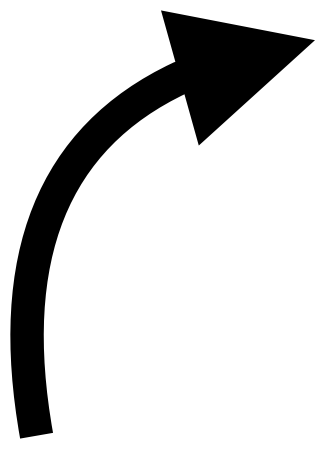


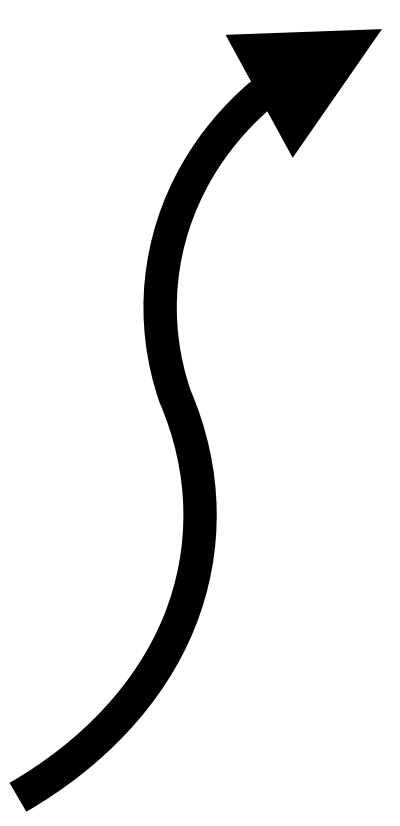


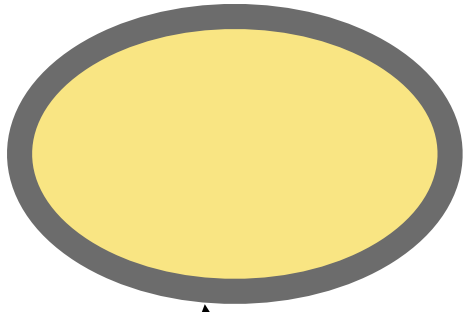



Outflow


Outflow







Remove pressure


Initial By

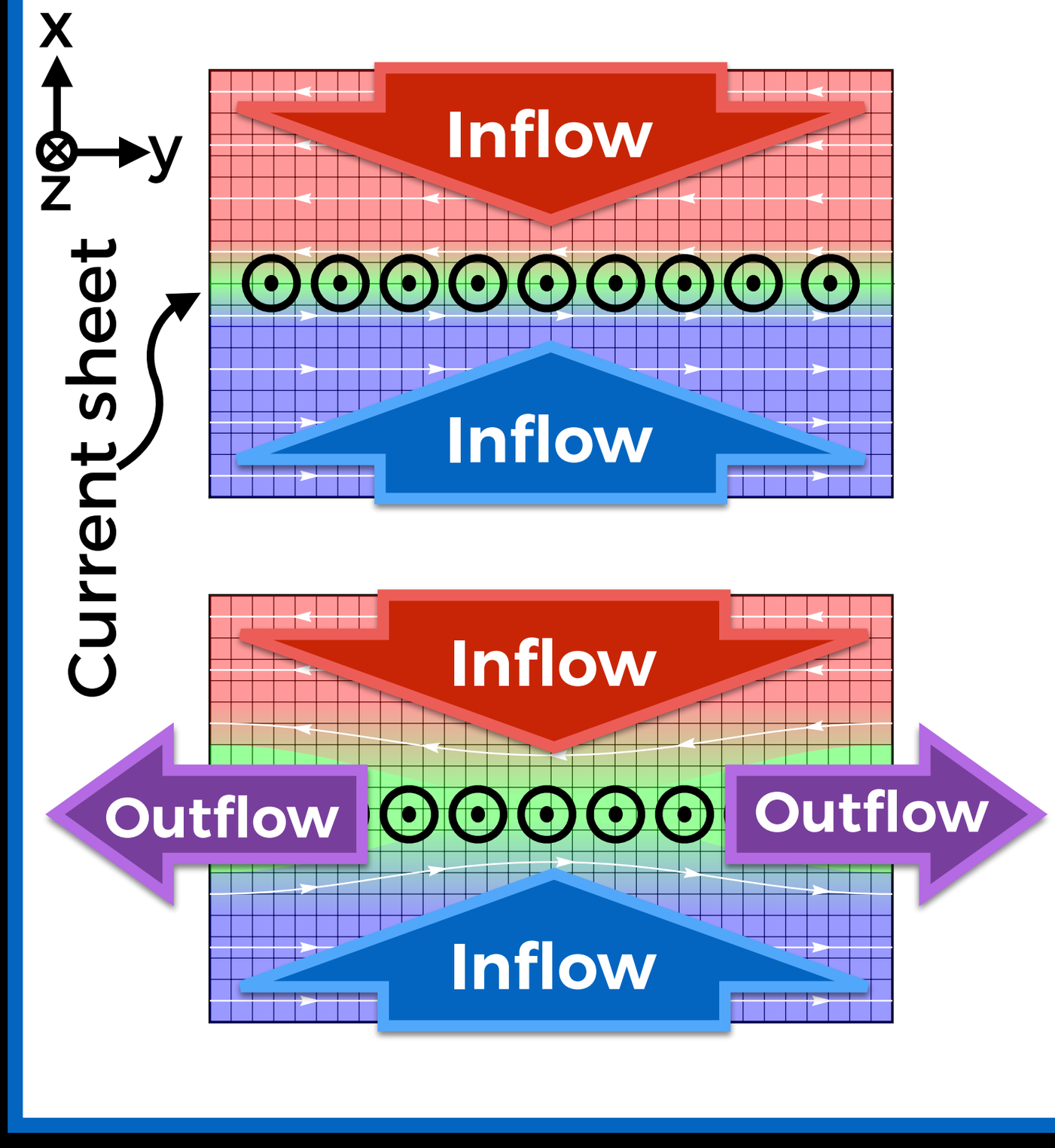

Inflow


Inflow

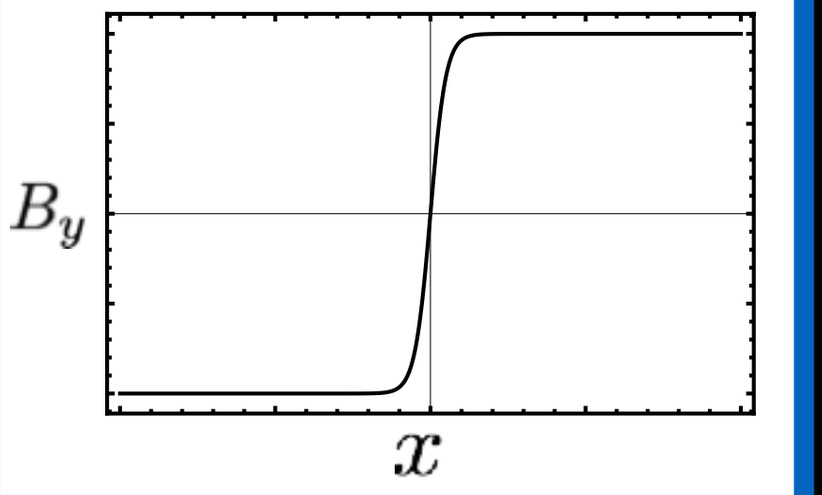

Inflow


Inflow

Start with alternating $\vec{B}$-field and trigger reconnection



- B-field initialized in Harris equilibrium



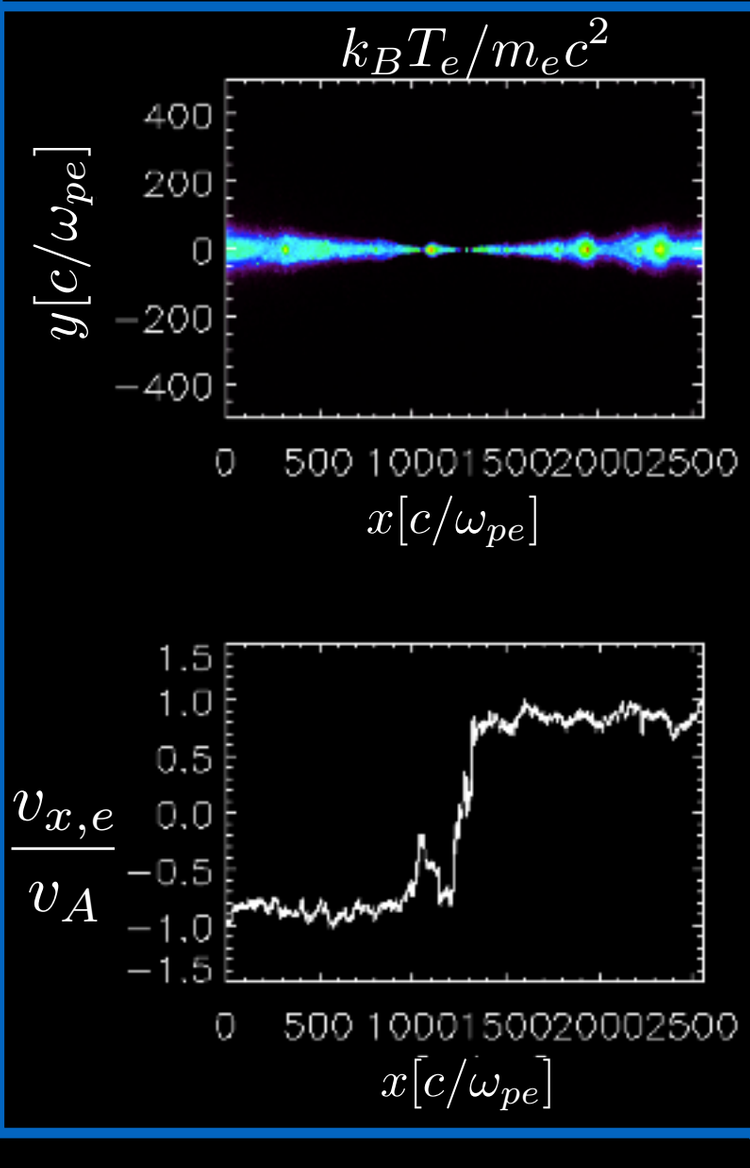
$$\mathbf{B} = B_0 \tanh(x/L)\mathbf{e}_y$$

- Hot, overdense strip of particles at beginning (green)
- Remove the particle pressure in center to drive reconnection

Boundary conditions

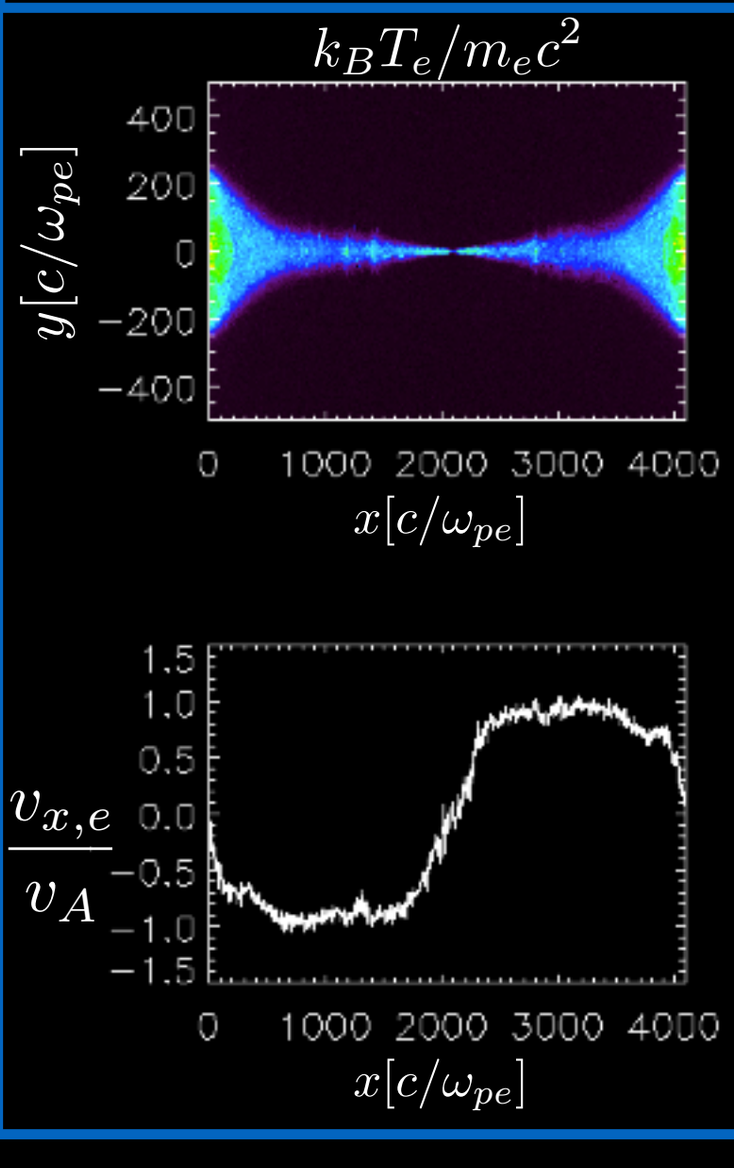
Outflow

- Particles escape along x-dir.
- Allows for study of long-term evolution of system



Periodic

- No particles are lost
- However, sensitive to boundaries after ½ Alfvén crossing-time



Adaptive

- Modified version of outflow boundary condition
- Includes additional controls necessary for high-beta case