Connection to black-hole physics

- Two main aspects to our investigation
  - Plasma physics
    - Explore a relatively unstudied region of plasma parameter space
  - Astrophysics
    - Provide (eventually) a lookup table for global simulations of black-hole accretion flows
    - Even if it turns out that the dependence on input values is weak, at least this will be known from a first-principles investigation

Summary and future directions

Summary:

- Reconnection provides less net heating for high-beta compared to low-beta; $T_{e,\,out} / T_{e,in}$ approaches 1 for high beta
- Low-beta: ~3% of the magnetic energy ends up as electron heating, and ~10-12% ands up as ion heating

For the future:

- Explore guide field reconnection
- Push to higher beta
- Vary the mass ratio
- Run with wider range of sigma
- Use particle orbits to study heating mechanism
  - Is this the same as in the non-relativistic case?
- 3D simulations

Thank you for your attention