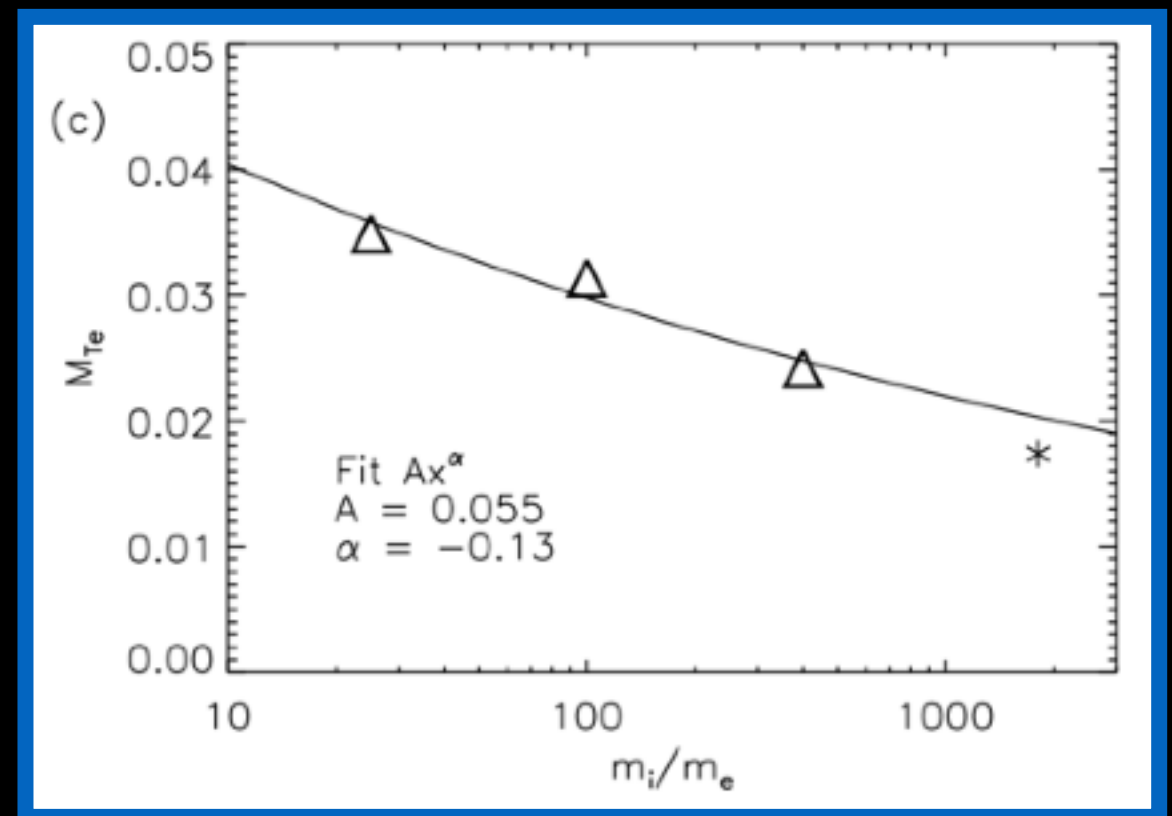


Electron heating will decrease with higher m_i/m_e

- ▶ In our simulations, we use an artificial mass ratio of $m_i/m_e = 25$
 - ▶ Why? This makes the problem computationally tractable
- ▶ We can expect our measured heating will decrease with higher mass ratio;

$$M_{Te} \sim (m_i/m_e)^{-0.13}$$

(Drake et al., 2014)



- ▶ Note: this scaling is consistent with the analytical model of Egedal et al.

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