Astrophysical Fluids, Lecture 5:

- Energy
  - The equation of state
  - Ideal gas
  - Barotropic equations of state – isothermal and adiabatic cases
  - Derivation of the energy equation
T=4\times10^7K "virialized" gas

Perseus cluster (X-ray image w/Chandra; Fabian et al. 2006)
Perseus cluster (X-ray image w/Chandra; Fabian et al. 2006)
Jet cones

Ambient region

Yang & Reynolds (2016a)