Astrophysical Fluids, Lecture 14:

- de Laval Nozzle (or how rockets work!)
  - Basic formulism
  - Conditions for subsonic to supersonic transitions
  - Physical interpretation
  - Applications – rockets and (maybe) astrophysical jets
Galaxy clusters: jet in M87

Credit: HST M87
Galaxy clusters: jet in Cen A

Credit: X-ray - NASA, CXC, R.Kraft (CfA), et al.; Radio - NSF, VLA, M.Hardcastle (U Hertfordshire) et al.; Optical - ESO, M.Rejkuba
De Laval nozzle applied to jets
(Blandford&Rees 1974)
Jets from young stars