Dynamics of AGN Outflows in Galaxy Clusters

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- Interested in understanding the effects of radio-mode AGN feedback on galaxy clusters
  - Ratios of broad FUV lines to Hβ can be measured and compared to predictions from Cloudy to better understand accretion processes
- Ionizations, metal abundances, and locations of metal-line absorbers from several different environments can be constrained via Cloudy predictions. Regions of interest include:
  - The outflow directly from the BCG (*How fast is it moving & what is it made up of? To what degree is it photo- or collisionally ionized?*)
  - The surrounding CGM (*to what extent will star-formation at large radii be prevented by feedback?*)
  - Infalling star-forming systems associated with cooling flows (*How do they form and how are they affected by feedback?)*