

Contribution ID: 79

Type: **not specified**

## Interaction between a central radio galaxy and the ICM

*Wednesday 17 August 2022 13:45 (25 minutes)*

Chandra observations of radio galaxies hosted by the central galaxy of a group or cluster continue to provide insights into the makeup of jets and lobes and their interactions with the environment. My main focus will be implications of the rich X-ray and radio structure observed in Cygnus A. Among other things, I will argue that the feature known as the X-ray jet in Cygnus A is formed by encounters between gas clouds and the jet, which leave trails of remnant plasma scattered along the path of the jet. I will also discuss early results of numerical simulations for the formation of the hole found in the X-ray emission around the primary hotspot in the eastern lobe of Cygnus A.

**Authors:** ZUHONE, John (Center for Astrophysics | Harvard & Smithsonian); NULSEN, Paul (Harvard-Smithsonian Center for Astrophysics)

**Presenter:** NULSEN, Paul (Harvard-Smithsonian Center for Astrophysics)

**Session Classification:** Wednesday afternoon: AGN feedback