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## 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.

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