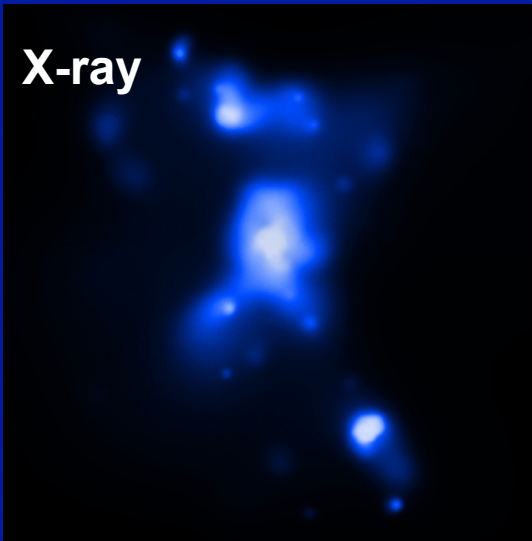


Chandra analysis of 4C+29.30

X-ray



RA=08 40 02.35; DEC=29 49 02.6

$z=0.065$

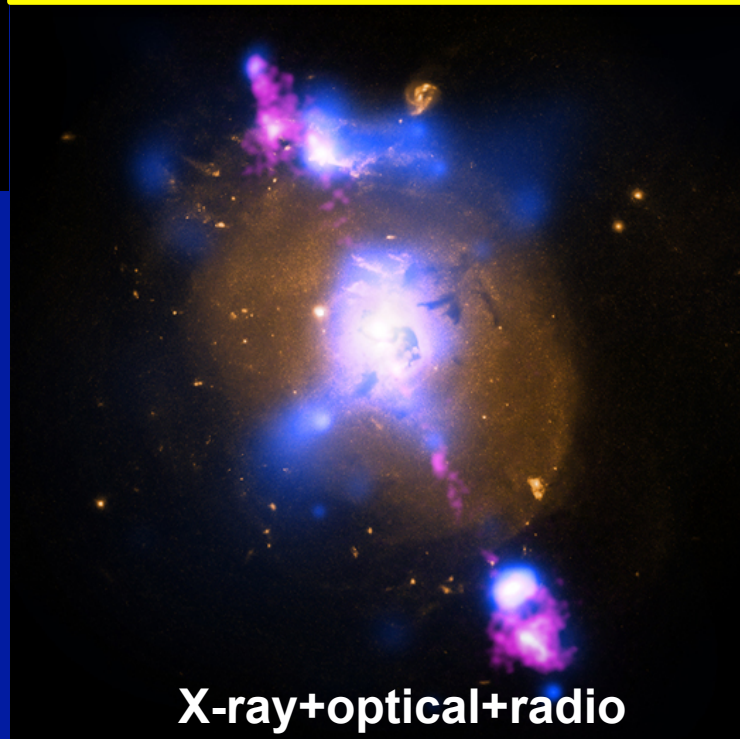
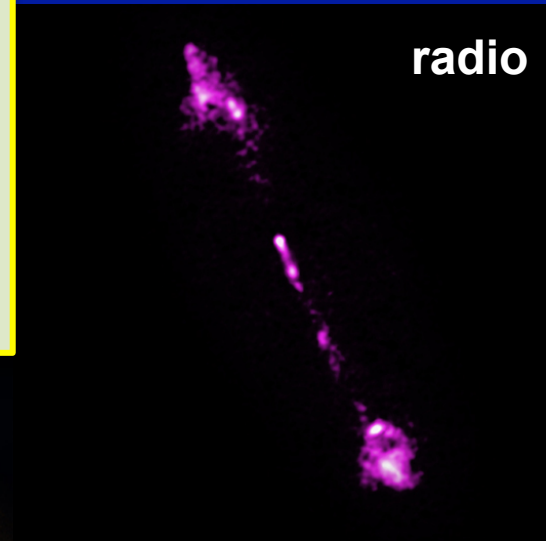
$N_{\text{H,Gal}}=4.23 \times 10^{20} \text{ cm}^{-2}$

4 long exposures *Chandra*, 284.5ks

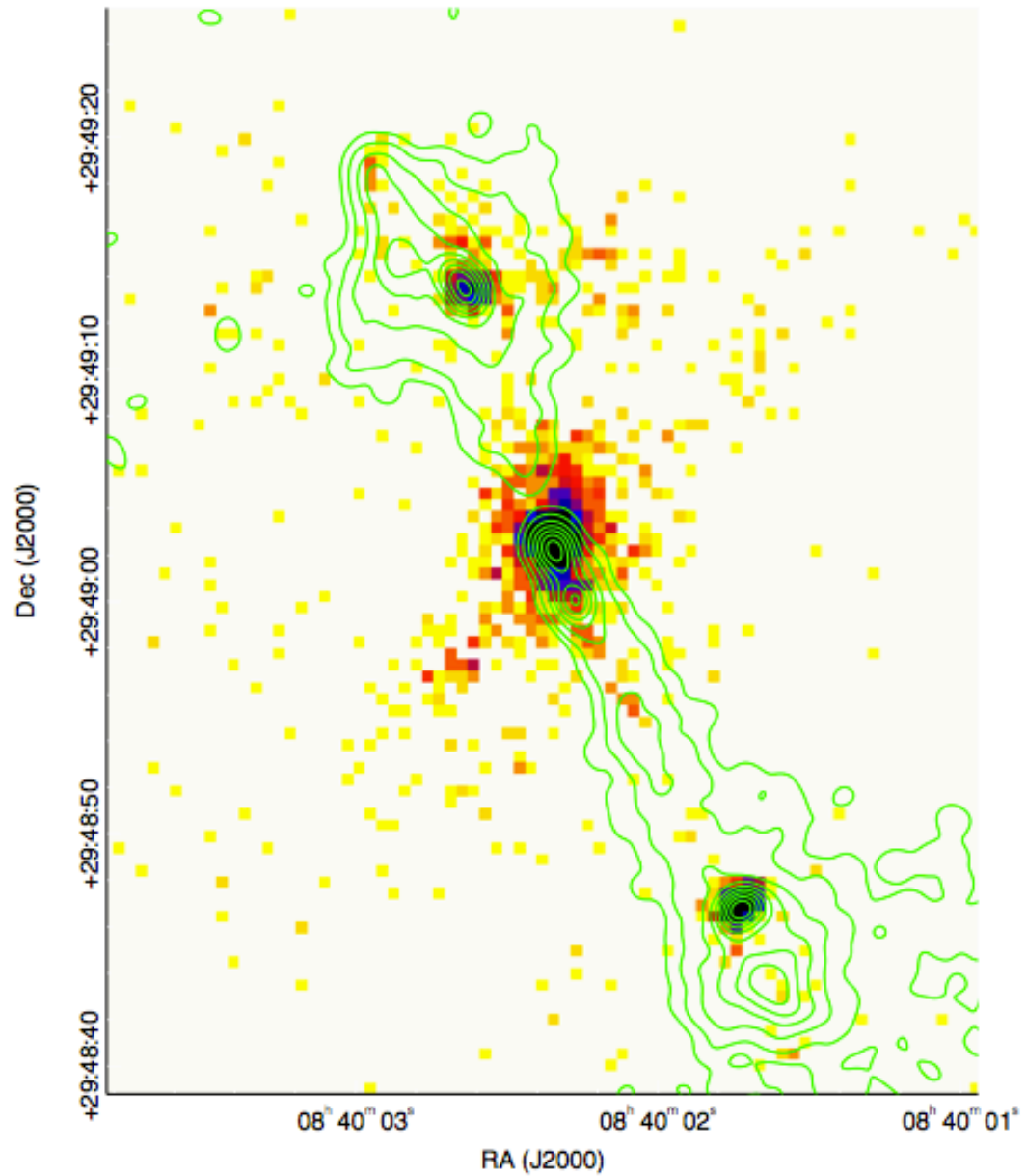
Transitional radio morphology FRI-

FRII ($L_{\text{R}} \approx 10^{42} \text{ erg/s}$)

radio

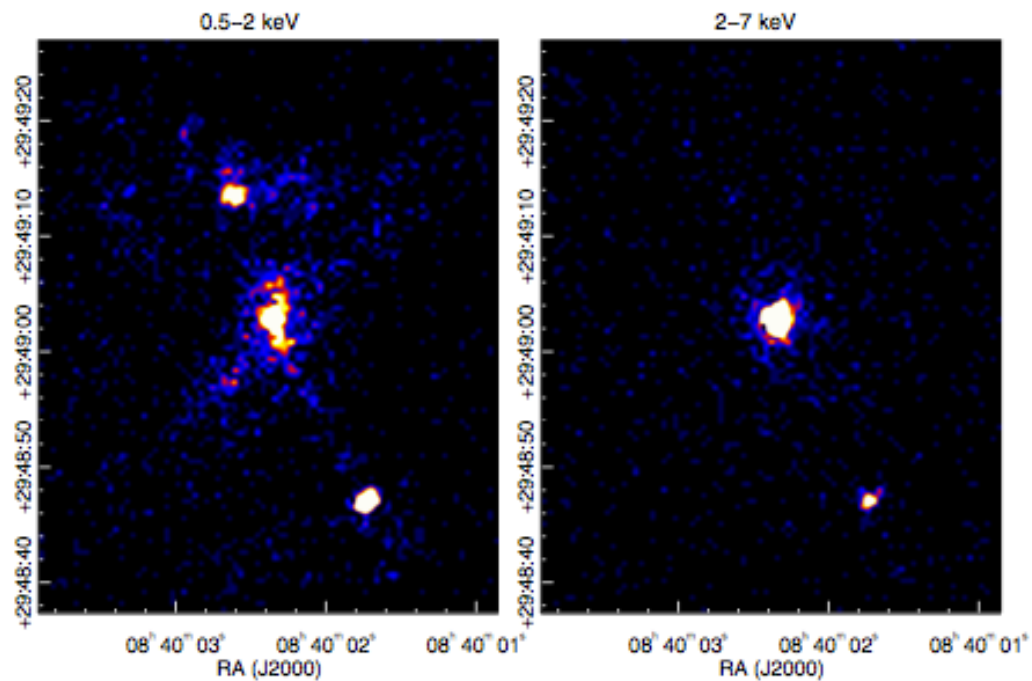


X-ray+optical+radio

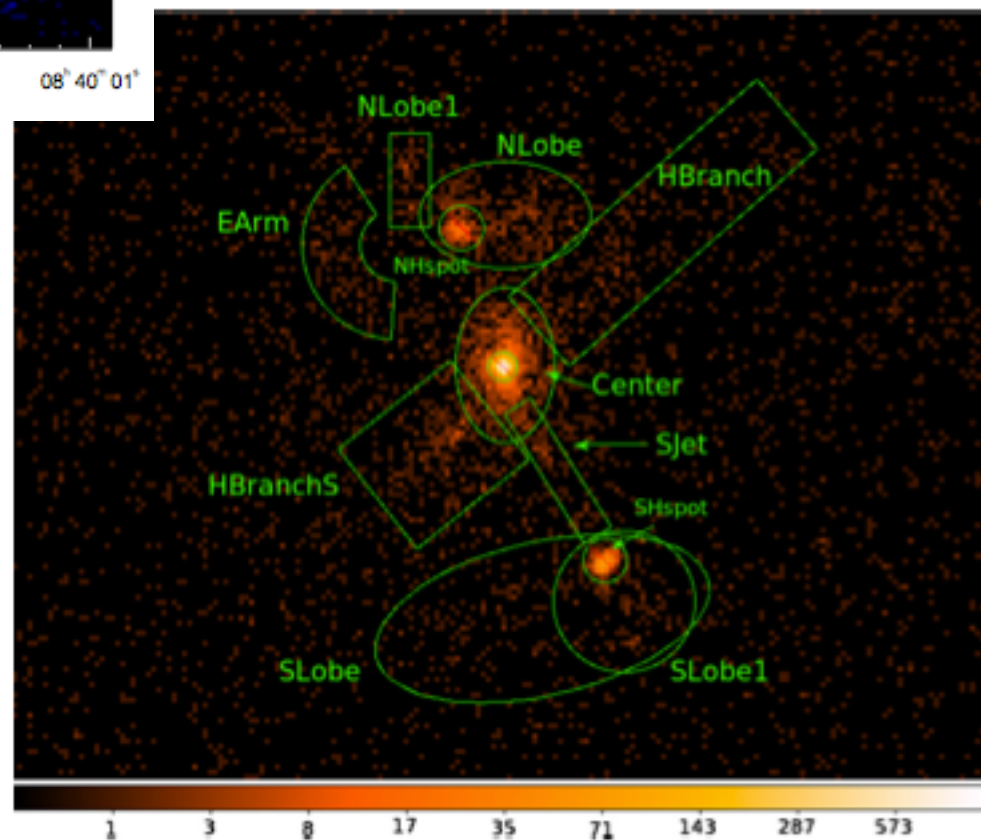


X-ray: 0.5-7 keV combined image
Contours from **VLA** 1.45 GHz map





Significant structures in the soft band
 Most of the hard emission from the
 nucleus



PLAN

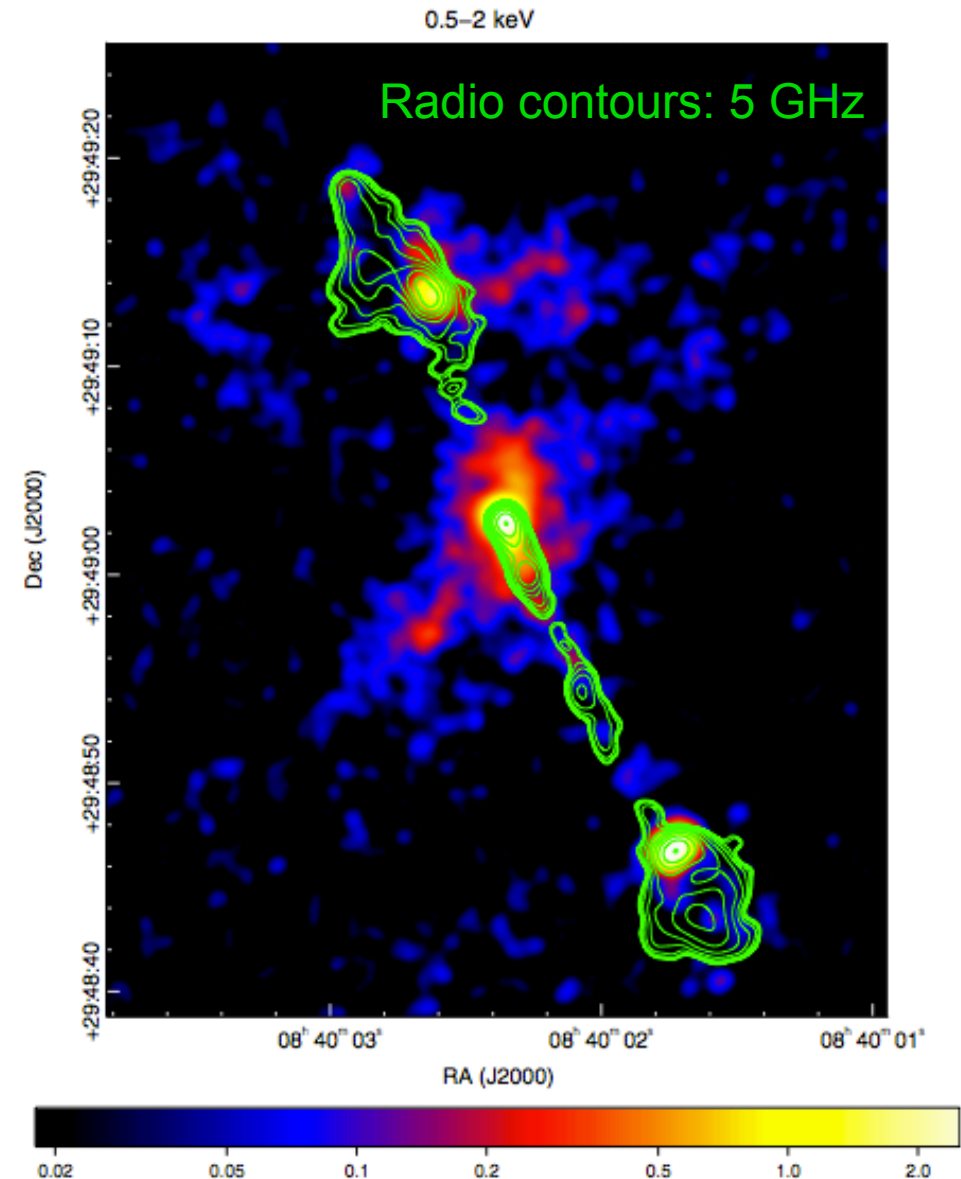
MAIN

1. Compare the X-ray emitting regions to the radio components from 1.5 and 5GHz maps
2. Extraction and analysis of *Chandra* spectra from the mosaic image (core, jets, lobes, extended features, ...)

Proper (but longer) way to proceed: spectral extraction from the four individual pointings, then merge the X-ray spectra

OPTIONAL

1. Extraction of spectra using XMM data (nucleus, extended emission, etc.), spectral analysis and comparison to *Chandra* results
2. Simultaneous *Chandra* (or XMM) and *Swift*/BAT (70month) spectral analysis of the nucleus



Main publications

- ① Siemiginowska et al. 2012, ApJ, 750, 124
Chandra data
- ② Sobolewska et al. 2012, ApJ, 758, 90
XMM-Newton + Swift/BAT data