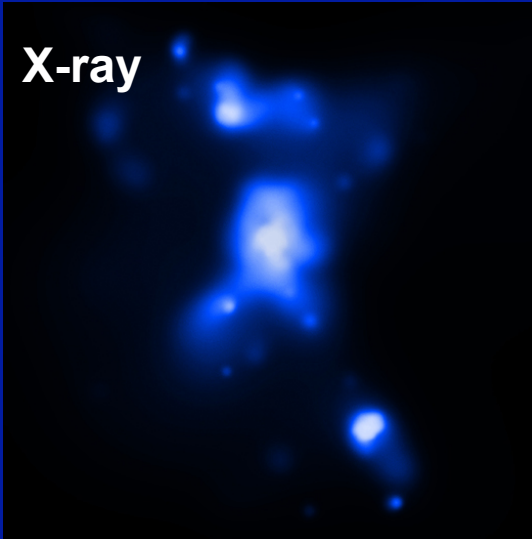


# Chandra analysis of 4C+29.30

X-ray



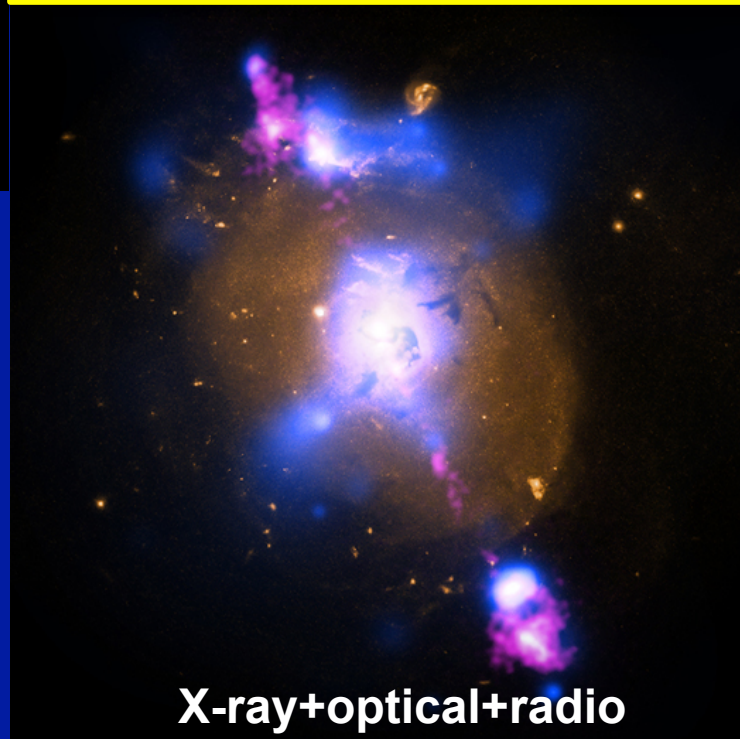
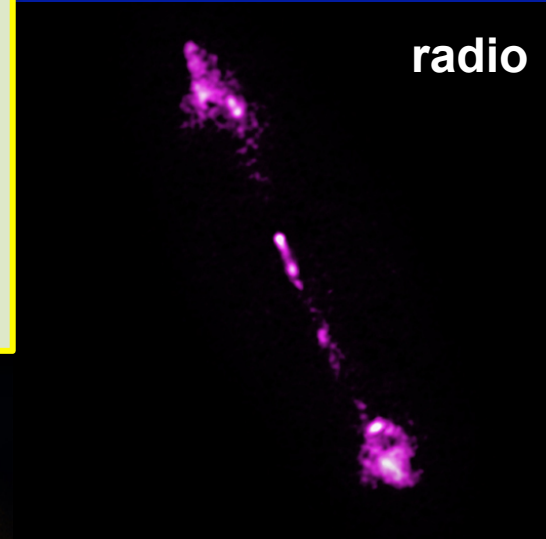
RA=08 40 02.35; DEC=29 49 02.6

$z=0.065$

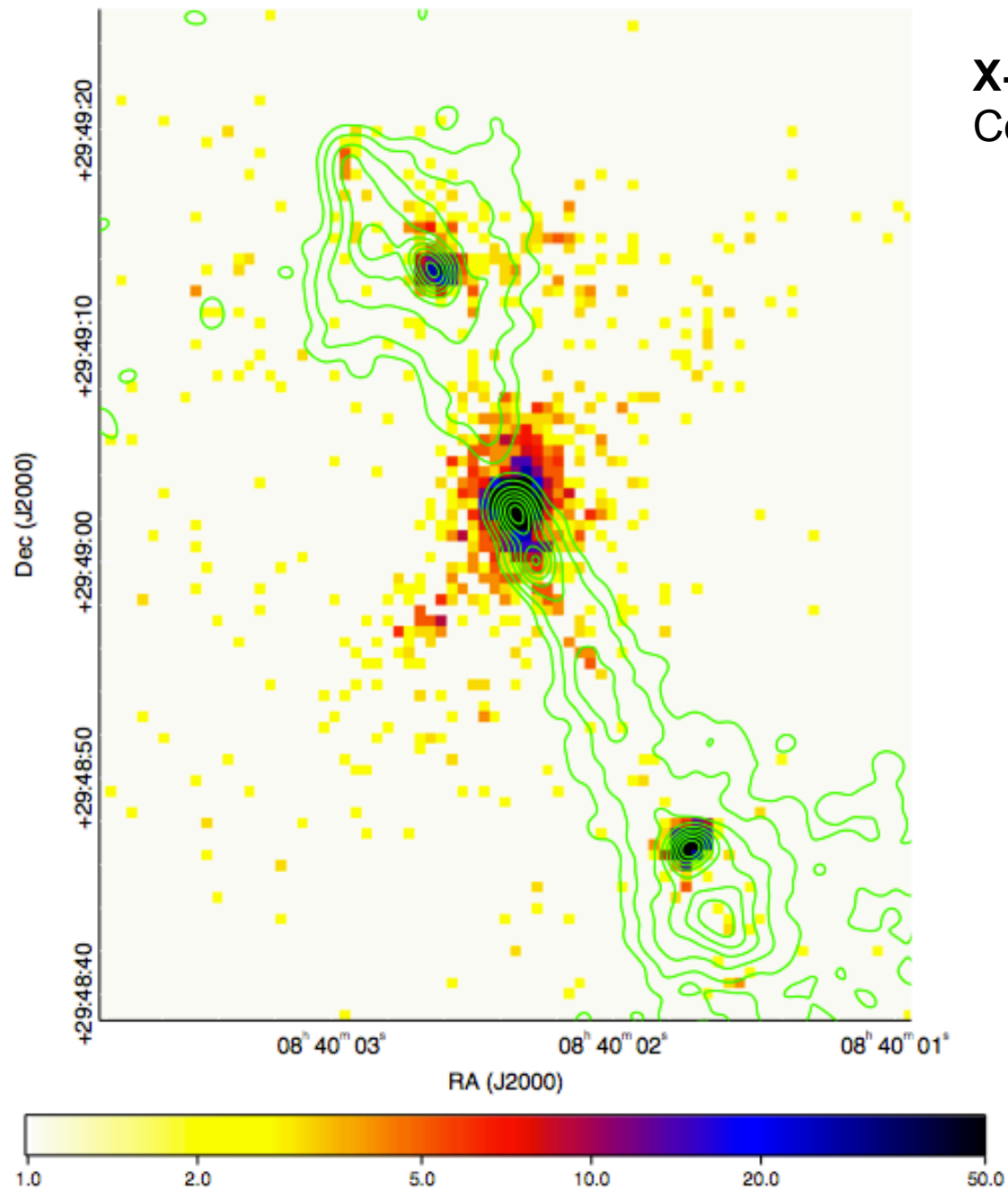
$N_{\text{H,Gal}}=4.23 \times 10^{20} \text{ cm}^{-2}$

4 long exposures *Chandra*, 284.5ks  
Transitional radio morphology FRI-  
FR II ( $L_{\text{R}} \sim 10^{42} \text{ erg/s}$ )

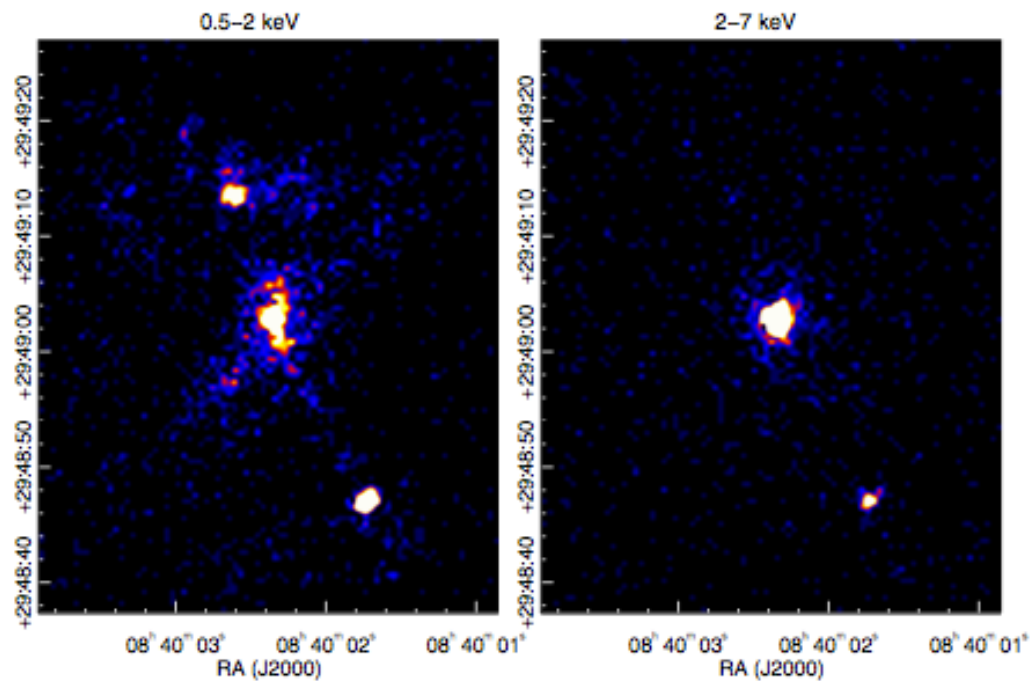
radio



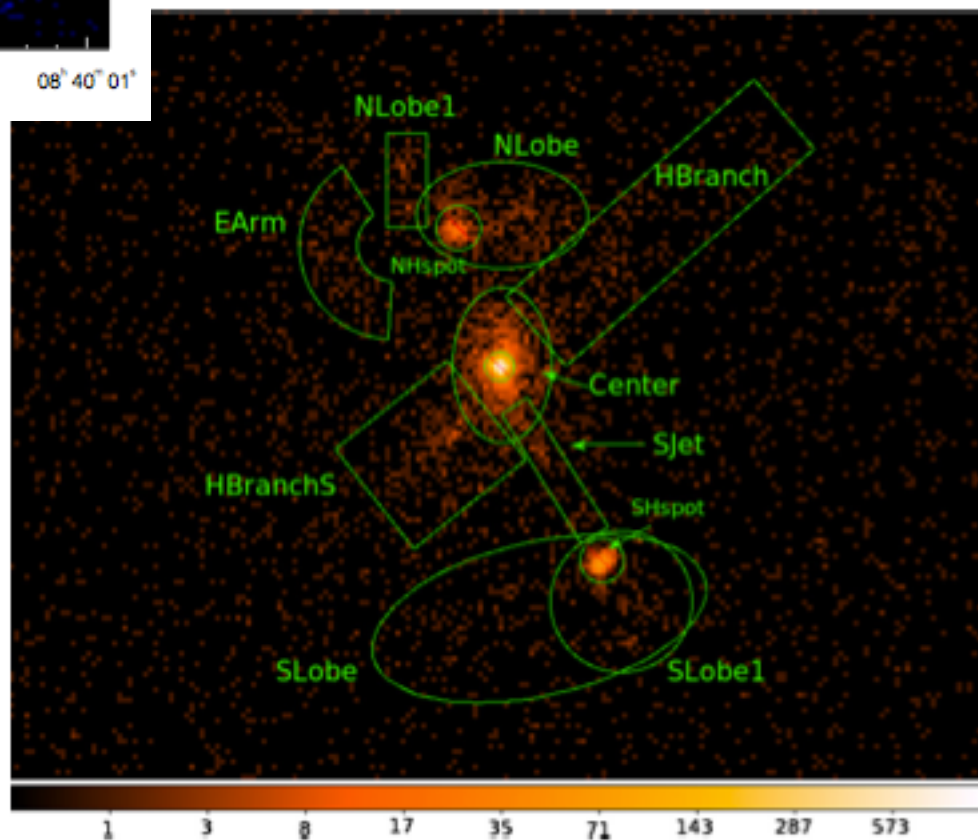
X-ray+optical+radio



**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

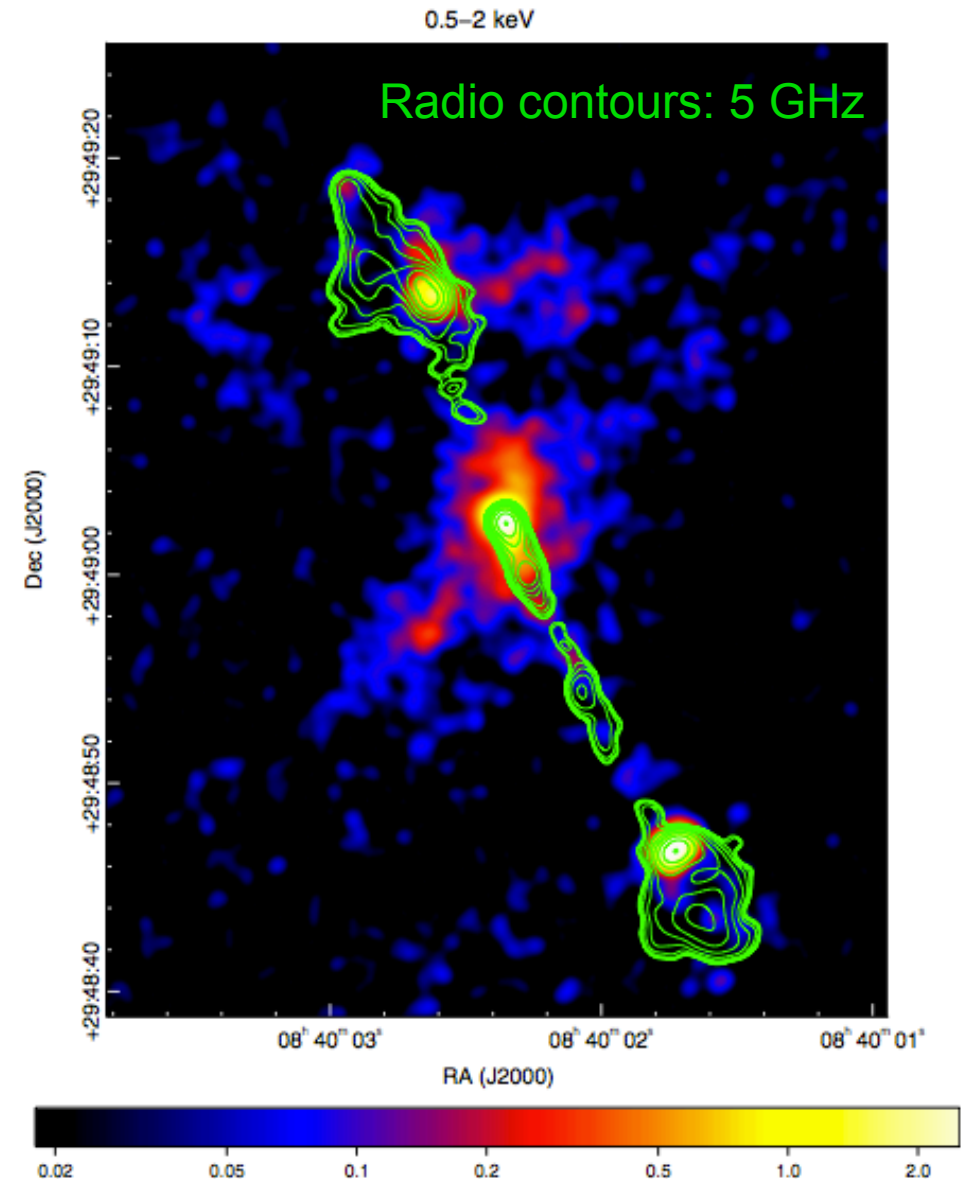
## MAIN

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, ...)

*Is there any difference in the X-ray spectral properties using extraction from the mosaic or from individual pointings?*

## OPTIONAL

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