

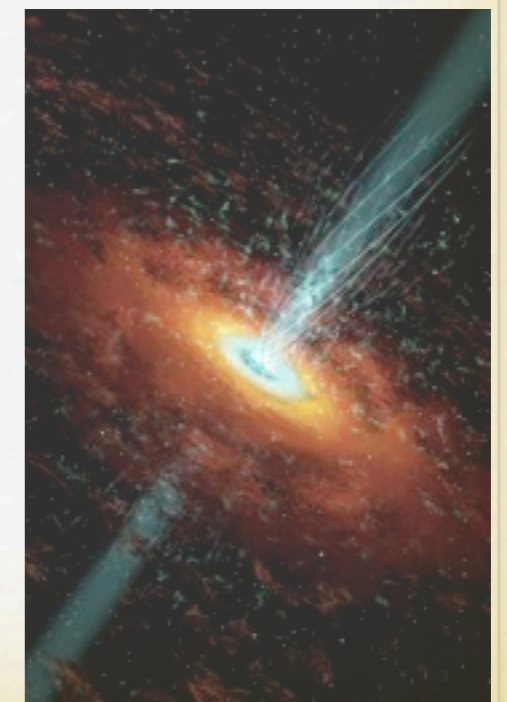
Instituto de Astrofísica de Andalucía (IAA_CSIC)

Sol N. Molina

Dr. José Luis Gómez Fernández

Dr. Iván Agudo

Carolina Casadio



The main goal



is to obtain a better understanding of the structure of the innermost parts of relativistic jets in AGN.

Technique to resolve the innermost regions



Very Long Baseline Interferometry (VLBI)

to study flares at high energy

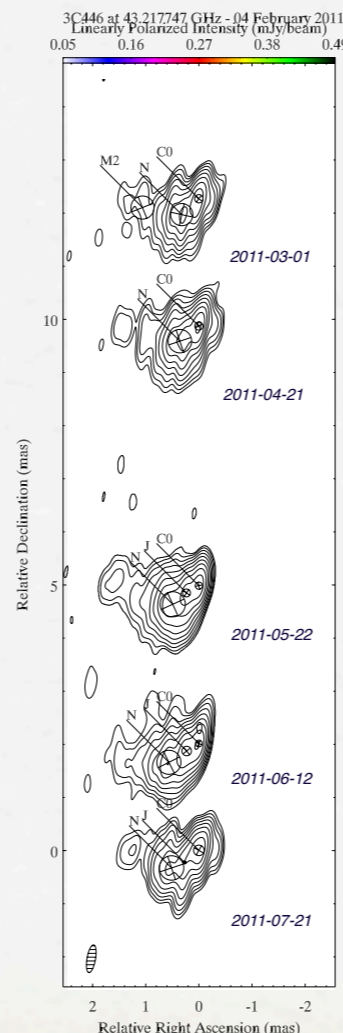


multifrequency study

Collaborating with a project led by the Boston University Blazar Group (Alan Marscher & Svetlana Jorstad)

- Monthly 43 GHz polarimetric VLBA data.
- Millimetric observation each two weeks with the 30 meters telescope in Sierra Nevada, Spain.
- Monthly optical polarimetry with the Calar Alto 2.2 meters Telescope, Lowell Observatory, the St. Petersburg University Telescope.
- X-ray monitoring with RXTE and Swift.
- γ -ray flux monitoring with Fermi.

3c446

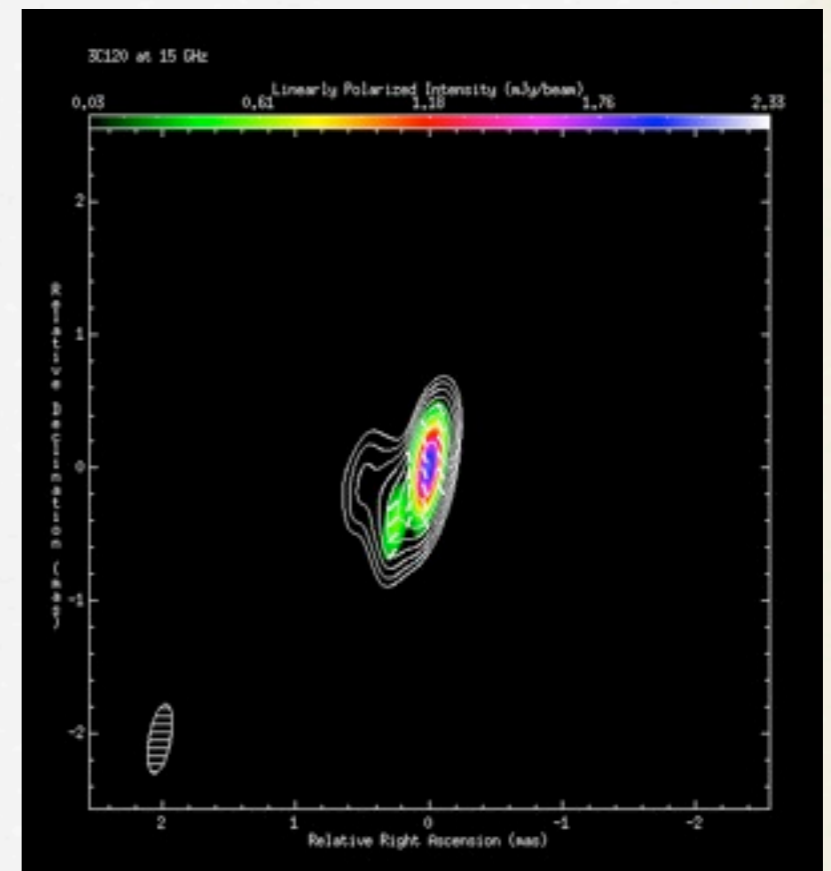


3C446 at 43.217747 GHz - 04 February 2011
Linearly Polarized Intensity (mJy/beam)
0.05 0.16 0.27 0.38 0.49

Relative Declination (mas)

Relative Right Ascension (mas)

Peak Total Intensity 0.8552 Jy/beam (noise at 3.23 mJy/beam - Noise Pol. 10.4% peak)
Total Intensity Contours 0.69,1.28,2.34,4.31,7.91,14.52,26.68,49.00,90% of peak
Beam FWHM 0.53x0.16 mas at -10.00 deg.



3C120 at 15 GHz

Linearly Polarized Intensity (mJy/beam)
0.05 0.61 1.18 1.76 2.33

Relative Declination (mas)

Relative Right Ascension (mas)

Sequence of images from 2007 to 2012.

The main goal



is to obtain a better understanding of the structure of the innermost parts of relativistic jets in AGN.

Technique to resolve the innermost regions



Very Long Baseline Interferometry (VLBI)

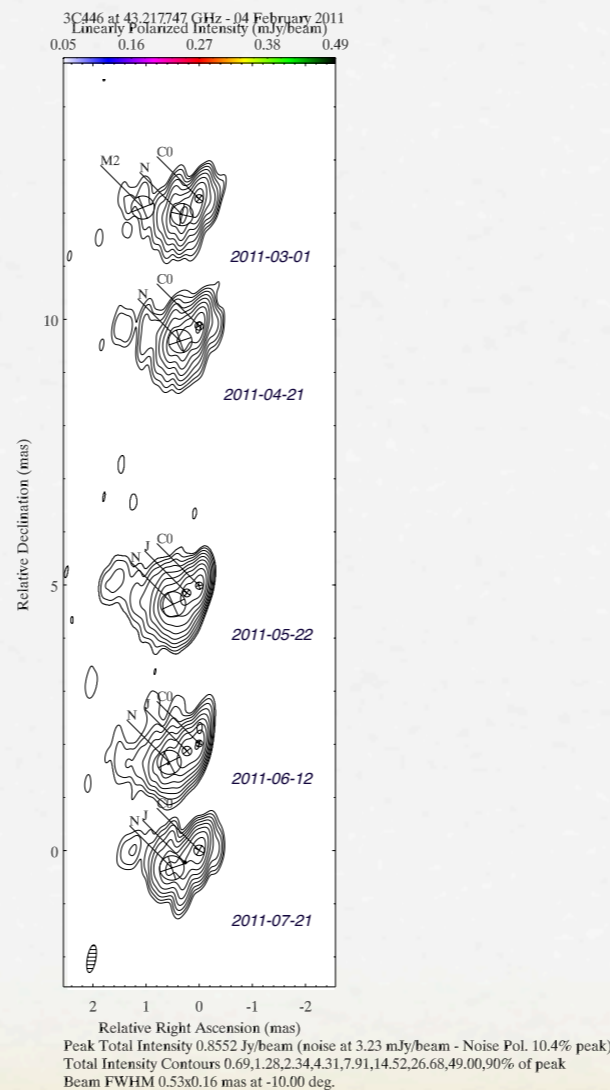
to study flares at high energy



multifrequency study

Collaborating with a project led by the Boston University Blazar Group (Alan Marscher & Svetlana Jorstad)

- Monthly 43 GHz polarimetric VLBA monitoring.
- millimetric observation each two weeks with the telescope 30meters in Sierra Nevada, Spain.
- Monthly optical polarimetry with the Calar Alto 2.2m Telescope, Lowell Observatory, the St. Petersburg University Telescope.
- X-ray monitoring mainly with RXTE and Swift.
- γ -ray flux monitoring with Fermi.



3c446

