

## Is GLIMPSE-C01 really a gamma-ray emitter?

GLIMPSE-C01 is a globular cluster located in the direction of Aquila (Kobulnicky et al 2005). More than a decade ago, we proposed it as a gamma ray emitter given its coincidence with the 9.6 arcmin 95% confidence error radius of the Fermi source 0FGL J1848.6-0138 (Luque-Escamilla et al 2009). The recent update of the Fermi catalogue confirms the gamma-ray detection, being now named as 4FGL J1848.7-0129, and a much more precise location is available (95% ellipse error or of only  $2.0 \times 1.9$  arcmin). The Fermi source is currently associated to GLIMPSE-C01 with a Bayesian probability of 99.94%, thus in principle supporting our initial guess.

Lately, GLIMPSE-C01 came into the spotlight because a faint X-ray transient named MAXI J1848-015 has recently been discovered inside the cluster. Although the associated gamma ray emission has no confident variability, this transient object was proposed to be related to the Fermi source (ATel #14420).

In view of this outcome, we have revisited the multi-wavelength data available for GLIMPSE-C01. In particular, we found that the all-sky radio survey with the Giant Metrewave Radio Telescope in Pune (India) detected an obvious source at 150 MHz just in the middle of the latest 4FGL J1848.7-0129 ellipse, which is well offset from the center of the cluster. In fact, this radio source has no detected higher radio frequency counterpart, indicating a likely non-thermal spectral index. Moreover, it displays, a radio morphology strongly reminiscent of a one-sided jet emitter. There is also a Chandra counterpart to the core of this new radio source that exhibits clear X-ray variability and remained unnoticed until now. Therefore, we have collected serious evidences of the existence of a new blazar candidate to be tentatively associated with 4FGL J1848.7-0129 source instead of GLIMPSE C01. Further observational studies of this new counterpart candidate will hopefully give more credit to this latest identification proposal.

**Authors:** LUQUE-ESCAMILLA, Pedro (UJA); MARTÍ, Josep (Universidad de Jaén); MESTRE, Enrique (Universidad de Jaén); Dr COMBI, Jorge (Universidad de Jaén); Dr ALBACETE-COLOMBO, Juan Facundo (Universidad de Rio Negro, Sede Atlantica - CONICET, Viedma CP8500, Argentina)

**Presenters:** LUQUE-ESCAMILLA, Pedro (UJA); MARTÍ, Josep (Universidad de Jaén)

**Session Classification:** Contributed posters