

# ***Fermi*-LAT Search for Pulsar Wind Nebulae Associated With High- $\dot{E}$ $\gamma$ -Quiet Pulsars**

## **1. Introduction**

- Pulsar Physics
- PWNe (high energy IC emission)
- PWNe detected at GeV energies
  - 2PC Off-peak PWNe search
  - TeVCat PWNe search
- $\gamma$ -quiet pulsars
- Search for new pulsars

(Nolan et al. 2012).

## **2. Analysis Method**

### **2.1. Pulsar Selection Criteria**

### **2.2. LAT Data Preparation**

Analysis results

## **3. Discussion**

## **REFERENCES**

Nolan, P. L., et al. 2012, ApJS, 199, 31

## A. notes

Benefits:

1. Improved time range (XXX months vs XXX months in 2PC)
2. Improved upper limit from likelihood test.
3. Better analysis method (search for extended sources, could be more sensitive?) Look for hard-index sources (unlike 2PC).
4. For example, Lande et al 2012 discovered Gamma-ray emission from HESS J1616-508 which is associated with PSR J1617-5055.
5. Note: Table 3 and 4 get upper limits assuming cutoff spectrum, not suitable for PWNe searches. For describing of 2PC flux upper limits, see <https://confluence.slac.stanford.edu/x/U>