



Poster session 2 – Tuesday 5 July

P2.003 A Search for Neutrinos from the Fermi Bubbles with the ANTARES Telescope

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The Fermi Bubbles are two extended regions of γ -ray emission above and below the Galactic Centre. Many models to explain the structures have been proposed, yet their origin remains unclear. The measurement of a neutrino flux from the Fermi Bubbles could therefore provide a valuable distinction between hadronic and leptonic emission scenarios. A search for this flux using four years of ANTARES data and a recent update of the analysis to six years resulted in a non-significant excess in the signal region. The search concentrated on track-like event signatures from muon neutrino charged current interactions. The results obtained from two more years of data (2014 and 2015) will be presented. Additionally, the analysis can benefit from the inclusion of shower-like neutrino event signatures in the detector. Thanks to recently improved reconstruction algorithms, these events can now be reconstructed in ANTARES with a median angular precision of better than three degrees. This opens the possibility to probe an all-flavour neutrino flux from the Fermi Bubbles using eight years of ANTARES data.