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## Spectral studies of flaring quasar PKS 1424-418 above 100 MeV with Fermi-LAT

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**Abstract content**   
 (Max 300 words)   
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Flat Spectrum Radio Quasar (FSRQ) PKS 1424-418 is an Active Galactic Nucleus (AGN) located at a redshift  $z = 1.522$ . This source has shown several flaring episodes through the whole electromagnetic spectrum in recent years. A series of four outbursts were detected and studied by the Hartebeesthoek Radio Astronomy Observatory (HartRAO) at four different frequency bands during the October 2012 till September 2013 period. Fermi-Large Area Telescope (Fermi-LAT), a space-based gamma-ray detector, is collecting all sky data since 2008. We present an analysis of Fermi-LAT data on PKS 1424-418 during a period coincident with the radio activity of this FSRQ detected by HartRAO. This study of the flaring pattern of PKS 1424-418 can provide interesting constraints related to the physics of the gamma-ray production in FSRQs.

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Yes

**Level for award (Hons, MSc, PhD, N/A)?**

PhD

**Main supervisor (name and email) and his / her institution**

Prof. Soebur Razzaque  
srazzaque@uj.ac.za  
University of Johannesburg

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Yes

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No

**Primary authors:** Mr DIRIRSA, Feraol (University of Johannesburg); Dr BRITTO, Richard (University of Johannesburg); Prof. RAZZAQUE, Soebur (University of Johannesburg)

**Presenter:** Mr DIRIRSA, Feraol (University of Johannesburg)

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