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# Observations of extended VHE gamma-ray emission from MSH 15-52 with CANGAROO-III

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## Abstract content

The gamma-ray pulsar PSR B1509-58, surrounded by the supernova remnant MSH15- 52, was expected to be a Very High Energy gamma-ray source. CANGAROO-I 3.8 m telescope reported a marginal detection of VHE gamma-rays above 1.9 TeV and recently H.E.S.S. detected an extended signal along with the pulsar jets, from sub-TeV to tens of TeV.
We observed MSH15-52 using CANGAROO-III imaging atmospheric Cherenkov telescope array located in South Australia, from April to June in 2006. We also detected gamma-rays above 860GeV with more than 5 sigma level during an effective exposure of 48.4 hours. Obtained differential flux of VHE gamma-ray is consistent with that of H.E.S.S., and its morphology shows an extended emission compared to our PSF.

## If this papers is presented for a collaboration, please specify the collaboration

CANGAROO

## Summary

## Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 2 (OG part 1), pages 629-632

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