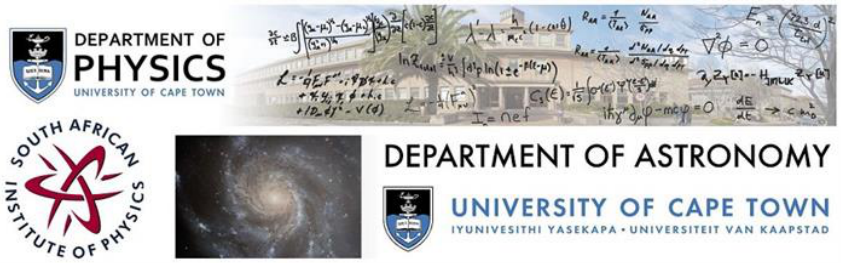

Contribution ID: **144** Type: **Oral Presentation**

Investigating gamma-ray fluxes from globular clusters

Thursday, 7 July 2016 10:20 (20 minutes)

Abstract content
   (Max 300 words)
Formatting &
Special chars

(For the H.E.S.S. Collaboration)
Globular clusters (GCs) are large collections of old stars that are orbiting the core of a galaxy. Our Milky Way Galaxy has about 160 known GCs, with perhaps more to be discovered. We analysed 20 GCs observed by the H.E.S.S. very-high-energy (>100 GeV) gamma-ray telescopes. The detection of Terzan 5 was confirmed and flux upper limits were obtained for the remaining 19 sources. We accumulated the necessary parameters for each GC and ran a numerical model that predicts the inverse Compton gamma-ray flux expected from each cluster. The five most promising GCs for future observations by Cherenkov Telescope Array (CTA) will be highlighted.

Apply to be
 considered for a student
   award (Yes / No)?

Yes

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

MSc

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

Paulus Kruger
ppauluskruger@gmail.com
North-West University

Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

Yes

Please indicate whether
this abstract may be
published online
(Yes / No)

Yes

Primary author: Ms NDIYAVALA, HAMBELELENI (NORTH-WEST UNIVERSITY)

Co-authors: Prof. VENTER, Christo (North-west University, Potchefstroom Campus); Dr KRUGER, Paulus (NORTH-WEST UNIVERSITY)

Presenter: Ms NDIYAVALA, HAMBELELENI (NORTH-WEST UNIVERSITY)

Session Classification: Astrophysics (2)

Track Classification: Track D1 - Astrophysics