## TeVPA 2023 - Napoli Italy



Contribution ID: 85 Type: not specified

## The Southern Wide-field Gamma-ray Observatory

Thursday, 14 September 2023 17:30 (15 minutes)

The Southern Wide-field Gamma-ray Observatory (SWGO), currently in the R&D phase, is the project to design and build the first wide-field ground-based observatory in the Southern hemisphere, for the detection of gamma-rays from a few hundred GeV to a few PeV. The extensive air shower array, planned for deployment at an altitude greater than 4400 m a.s.l., will be primarily based on water Cherenkov detectors units and will provide an unprecedented view of the Southern Sky at the most extreme gamma-ray energies. SWGO will complement CTA in terms of technical capabilities, and the existing ground-based particle detectors of the Northern Hemisphere, namely HAWC and LHAASO, in terms of geographical location, delivering a rich science programme. The collaboration is highly invested in the evaluation of different detector and array configurations, prototyping of detector units, and in the process of site search. In this talk, I will present an overview of the project's objectives, its current status and future perspectives.

Primary author: BARRES DE ALMEIDA, Ulisses (Centro Brasileiro de Pesquisas Físicas)

Presenter: BARRES DE ALMEIDA, Ulisses (Centro Brasileiro de Pesquisas Físicas)

Session Classification: GRA: Gamma Ray Astronomy

Track Classification: Gamma Ray Astronomy