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Finalizing the Design of the Southern Wide-field Gamma-ray Observatory

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The Southern Wide-field Gamma-ray Observatory (SWGGO) is a next-generation experiment and offers precise wide-field observations of the southern gamma-ray sky. SWGGO will be located in Pampa la Bola, Chile, at an altitude of 4770 m, cover an area of 1 km² and complement CTA and LHAASO. By leveraging double-layered Water Cherenkov Detectors, the SWGGO design will facilitate gamma-ray observations from 100s of GeV to the PeV scale.

This contribution will discuss recent advancements in optimizing the SWGGO array layout and detector design. Furthermore, we present the preliminary Instrument Response Functions of the observatory, demonstrating the effectiveness of the SWGGO approach.

Collaboration(s)

SWGGO Collaboration

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