

# Simulating the performance of the Southern Wide-view Gamma-ray Observatory

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**Abstract:** The Southern Wide-view Gamma-ray Observatory (SWGGO) will be a next-generation gamma-ray observatory using a large array of particle detectors at a high elevation site in South America. This project is currently in a three years R&D phase in which the design will be optimised for cost and performance. Therefore it is crucial to efficiently evaluate the impact of different design options on the scientific objectives of the observatory. In this contribution, we will introduce the strategy and the simulation framework in which this evaluation takes place. This development builds upon the established simulation framework by the HAWC collaboration and simultaneously adapts to ideas and concepts of the broader gamma-ray and astroparticle communities.

## Keywords

water-Cherenkov detector, Wide-field of view, gamma-ray instrumentation.

## Collaboration

SWGGO

## other Collaboration

## Subcategory

Future projects

**Primary authors:** SCHOORLEMMER, Harm (Max-Planck-Institut für Kernphysik); CONCEIÇÃO, Ruben (LIP - Laboratório de Instrumentação e Física Experimental de Partículas); Dr SMITH, Andrew James (University of Maryland); FOR THE SWGGO COLLABORATION

**Presenter:** SCHOORLEMMER, Harm (Max-Planck-Institut für Kernphysik)

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