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The Southern Wide-field Gamma Ray Observatory (SWGO)

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The Southern Wide-field Gamma Ray Observatory (SWGO) is a collaboration to develop and construct an air-shower array for ground-based gamma ray observatory in the Southern Hemisphere. The plan is to improve on or at least equal the performance of similar observatories, like LHAASO or HAWC.

The detector will be installed at an altitude above 4400m a.s.l. It will consist of Water-Cherenkov based detector units in an arrangement to allow the detection of gamma rays from a few hundred GeV up to a few PeV. The observatory will have a rich science program, which will allow it to complement IACTs and existing ground-based detectors in the Northern Hemisphere.

We will present the status and advances in the design of the Observatory, prototyping, and site selection for the project.

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