

Technological options for the Southern Wide-field Gamma-ray Observatory (SWGGO) and current design status

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The Southern Wide-field Gamma-ray Observatory (SWGGO) Collaboration is in the process of designing and prototyping a wide field of view, high duty cycle complement to CTA and the existing ground-based particle detectors of the Northern Hemisphere (HAWC and LHAASO). In this contribution, we will compare the various technological options for designing the detector and present an overarching system design accommodating them. We will introduce a feasible reference configuration that is used for the first large-scale simulations and cost estimates, and show ongoing prototyping work focused on reaching a maintenance-free and cost-effective detector.

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