

## Current status of the ALPACA project in Bolivia to search for PeVatrons in the southern sky

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ALPACA (Andes Large-area PArticle detector for Cosmic-ray physics and Astronomy) is a new air shower array observatory to be constructed in Mt. Chacaltaya, Bolivia in 2025. The experiment will mainly be dedicated to the search for Galactic PeVatrons in the yet-unexplored southern sky through the observation of sub-PeV gamma rays. The observatory consists of two parts: a surface air shower array (AS array, 83,000 m<sup>2</sup>) composed of 401 plastic scintillation detectors to reconstruct energies and arrival directions of primary events and an underground water-Cherenkov-type muon detector array (MD array, 3,600 m<sup>2</sup>) to discriminate between gamma- and cosmic-ray events. The prototype array ALPAQUITA is in full operation since 2023, and the studies of its performance using the recorded data are ongoing. This presentation gives scientific goals of the ALPACA project and its current status which includes the results of the data analysis using ALPAQUITA and the ongoing construction of an MD for the prototype array.

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