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Current status of ALPACA for exploring sub-PeV gamma-ray sky in Bolivia

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One page executive summary

• What is this contribution about?

Status of a new air shower array project in Bolivia, ALPACA, is presented.

• Why is it relevant / interesting?

Sub-PeV gamma-ray astronomy is important to know the origin of the galactic cosmic rays. Recent success in the Northern hemisphere naturally calls our interest to the observations in the Southern hemisphere.

• What have we done?

To realize ALPACA, some construction stages are defined and their sensitivities are studied. Infrastructure is ready and the prototype array ALPAQUITA is under construction.

• What is the result?

ALPAQUITA will start operation in 2021 followed by an extension to ALPACA (half) in 2022. Eventual extension to ALPACA (HD) and future Mega ALPACA plan are also being studied.