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# Equitable Astrophysics in Underserved Communities: The Case of the TAMBO Neutrino Observatory in the Peruvian Andes

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TAMBO is a next-generation neutrino observatory to be deployed in the Colca Valley in the Peruvian Andes. The TAMBO detector array will be composed of small detectors deployed over several square kilometers on the slopes of the canyon. This area has significant touristic, agricultural, and cultural value for the local population. While these facilities promise both educational and economic development for their host communities, it is not uncommon for the establishment of such research sites to be met either with skepticism or intense local opposition. In previous instances, this opposition has originated both from scientists ignoring the concerns of host communities and from a lack of shared (scientific) understanding and interest from the host community. In this poster, we propose strategies for siting observatories and engaging with local communities, derived from comprehensive discussions with anthropologists, sociologists, policymakers, and scientists. These recommendations, while crucial for TAMBO's development, also hold universal relevance for large-scale neutrino detectors situated in rural settings, outlining how scientists can responsibly engage host communities when searching for a particular experimental site.

# **Poster prize**

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