

High altitude observatory YBJ and ARGO project

Y. Tan and for the ARGO collaboration

Institute of High Energy Physics, Chinese Academy of Sciences

Abstract. A 5800 m² RPC (Resistive Plate Chamber) full coverage air shower array is under construction in the Yang-BaJing Cosmic Ray Observatory, Tibet of China, by the China-Italy ARGO Collaboration. YBJ is a large flat grassland with an area $10 \times 70 \text{ km}^2$ at 4300m altitude, about 90 north west from Lhasa. Its nearby power station, asphalt road to Lhasa, passing railway (will be constructed during the coming 5 years), optical fiber link to the INTERNET, rare snow and other favourable weather conditions are well suitable for setting an Astrophysical Observatory here. The installation of a large area carpet-like detector in this peculiar site will allow

one to perform an all-sky and high duty cycle study of high energy gamma rays from 100GeV to 50 TeV as well as accurate measurements on UHE cosmic rays. To insure the stable and uniform working condition of RPCs, a 104 M2 carpet hall was constructed, the RPC installation have be started in it since last November. The natural distribution and daily variation of temperature in the hall, the data concerning the performances of the installed RPCs, have been measured, the results are presented. ce

Correspondence to: Y. Tan (Tanyh@crpc1.ihep.ac.cn)