

## **Astroparticle Physics at Chacaltaya 5230 m a.s.l.**

*Thursday, 8 October 2015 11:00 (30)*

After a brief description of the main scientific findings at Chacaltaya, we presented the possibility of a network to search for Extensive Air Showers originated from primary cosmic rays at energies greater than  $10^{15}$  eV. Such EAS could be measured in the existing high altitude laboratories deployed in the region of Latin America. The Chacaltaya EAS array, located at 5230 m a.s.l. could be take as the centre of the network from where the distances of the others could be at El Alto (4000 m a.s.l.) and Cota Cota (3600 m a.s.l.) in Bolivia, at the distances of 15 and 25 Km from Chacaltaya respectively while the laboratory of Putre (3600 m a.s.l.) in Chile and Huancayo (3500 m a.s.l.) in Peru, are at the distances about 250 and 700 km respectively from Chacaltaya. Searching for simultaneous and parallel EAS events at multiple observatories is very important to look for non random cosmic rays. One of main aim of this network could be to search for simultaneous and parallel EAS events at multiple EAS observatories for example due to Gerasimova-Zatsepin effect at high altitude laboratories. Besides this, study other astrophysical phenomena, like high energy gamma rays from GRBs could be possible with the same array.

### **Presentation type**

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