Contribution submission to the conference Münster 2017

First results from TAIGA HiSCORE — •MARTIN TLUCZYKONT — Institut für Experimentalphysik, Luruper Chaussee 149, 22761 Hamburg

TAIGA is implementing a new, unique observation technique, based on a combination of the imaging air Cherenkov telescope (IACT) technique, and the HiSCORE concept (shower front sampling or timing technique). TAIGA aims at opening up the so far only poorly explored gamma-ray energy regime from few 10s of TeV to several 100 TeV. This energy range is particularly important to spectrally resolve the cutoff regime of the long-sought Pevatrons, the cosmic-ray PeV accelerators. TAIGA currently consists of an array of 28 wide angle (0.6 sr)air Cherenkov timing stations distributed over an area of 0.25 km^2 , and an imaging air Cherenkov telescope (IACT) with a diameter of $4.75 \,\mathrm{m}$ and a field of view of 10° . Further 17 stations are currently in deployment, and a second IACT is planned in the next two years. Data from one observation season with the first stage of the experiment are available for comparison to simulations. In this presentation, these comparisons, first results, and a serendipitous discovery of a pulsed laser on-board the international space station will be addressed.

Part:	Т
Туре:	Eingeladener Vortrag;Semi-Invited Talk
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