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DUKS, a Danish educational cosmic ray project

Abstract content

The DUKS project ("Danish educational cosmic ray project") is a future system of scintillator detector stations at high-schools in the Copenhagen and Århus regions. This presentation concerns the development of the DUKS project in Copenhagen. Each DUKS station is composed of two plastic scintillator detectors (~1m2 each). GPS signals are used to synchronize coincident events from the separate detector stations, which will allow for extended cosmic ray air showers to be detected and studied. A data acquisition system is being developed utilizing an embedded Linux processor which communicate GPS information, physics triggers and slow control data to a central server. Data from extended air showers and the performance of each DUKS station will be accessible in real time via the internet. The aim of the project is to boost the interest in science and technology subjects by directly involving high-school students in a modern research project. Therefore the students are foreseen to take part in the, installation, and operation of the detector station situated at their school. The project status is presented along with results from first observations of extended air showers over Copenhagen.

If this papers is presented for a collaboration, please specify the collaboration

Summary

Reference

Primary author(s) :Dr. LUNDQUIST, Johan (NBI)Presenter(s) :Dr. LUNDQUIST, Johan (NBI)Session Classification :Posters 2 + Coffee

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