



Contribution ID: 385

Type: **Talk**

The SST-1M Project of the Cherenkov Telescope Array: Status and Physics Perspectives

Monday 7 December 2015 16:40 (20 minutes)

The SST-1M telescope is one of the prototypes under construction proposed to be part of the future Cherenkov Telescope Array.

It uses a standard Davis-Cotton design for the optics and telescope structure, with a dish diameter of 4 meters and a large field-of-view of 9 degrees.

An innovative camera with Silicon Photomultipliers and fully digital readout and trigger electronics, DigiCam, has been designed and its first prototype will be installed on the existing telescope structure in 2016.

In this contribution we give a general overview of the project status.

The key existing performance results and commissioning data will be briefly presented while the emphasis will be put on the science case of the SST telescopes in the framework of the Cherenkov Telescope Array.

Main target of these small telescopes is to investigate the very high energy sky above few TeV with unprecedented sensitivity, making them the ideal probe of hadronic mechanisms in galactic sources and Pevatrons.

Moreover, the large field of view will allow to perform wide surveys and improve dark matter searches.

Author: HELLER, Matthieu (Universite de Geneve (CH))

Co-author: PRANDINI, Elisa (Universite de Geneve (CH))

Presenter: HELLER, Matthieu (Universite de Geneve (CH))

Session Classification: 19 - VHE & CR