

The Tunka EAS Cherenkov Array: Present and Future

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The Tunka EAS Cherenkov Array and its recent results are described. Now the Array consists of 25 wide-angle integral detectors of Cherenkov light flux and 4 detectors of a light pulse shape, which are distributed over a square with a side of 340 m. The Cherenkov light lateral distribution function and pulse time shape are practically model-independent. So, using the Cherenkov method, one can measure the primary energy spectrum and mass composition of cosmic rays with the best accuracy. The proposal of the new Cherenkov square kilometer array Tunka-133 is presented.

Keywords: Extensive air showers; air Cherenkov detectors.