

## **THE SHAPE OF LATERAL DISTRIBUTION AND PRIMARY COMPOSITION OF UHE CR**

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New theoretical predictions for lateral distribution of charged particles in extensive air showers taking into account the contribution of low-energy muons and simultaneously the effect of scintillation detectors response are presented. Our results based on the scaling representation of electron lateral distribution function and CORSIKA simulations allow to reproduce well experimental data of AGASA in wide primary energy region. Possible conclusions about the mass composition of ultra-high energy cosmic rays are discussed in detail.