

Mass composition of Ultra High Energy Cosmic Rays at the Pierre Auger Observatory

jeudi 21 juillet 2011 12:00 (15 minutes)

Authorship: The Pierre Auger Collaboration

The mass composition of ultra-high energy cosmic rays is a critical issue to understand their origin and nature. The Pierre Auger Observatory is a hybrid instrument which provides a powerful environment for the determination of the primary mass, being able to discriminate between photons, neutrinos and hadrons. Results on limits of photon and neutrino fluxes together with hadronic identification are presented. The dependence of average primary mass with energy by comparison with current predictions from models is finally discussed.

Auteur principal: Dr WAHLBERG, Hernan (IFLP - Universidad Nacional de La Plata)

Co-auteur: FOR THE PIERRE AUGER COLLABORATION, Full author list: <http://www.auger.org/archive/authors> [www.auger.org] 2011 05.html (Observatorio Pierre Auger, Av. San Martin Norte 304, 5613 Malargue, Argentina)

Orateur: Dr WAHLBERG, Hernan (IFLP - Universidad Nacional de La Plata)

Classification de Session: Astroparticle Physics

Classification de thématique: Astroparticle Physics