The 3rd international conference on particle physics and astrophysics Contribution ID : 91 Type : Poster

Performance of the NA61/SHINE experiment at CERN SPS with Pb-ion beams

Monday, 2 October 2017 15:10 (170)

Performance of the NA61/SHINE experiment at CERN SPS for reconstruction of the Pb-Pb collisions with beam energies of 13, 30, and 150 AGeV during the SPS operation in 2016 will be presented. Effects of the trigger and event selection is studied for basic event variables such as multiplicity of particles reconstructed using two Vertex and two Main Time Projection Chambers (TPCs) of the NA61/SHINE experiment and forward energy measured with the Projectile Spectator Detector. Particle identification capabilities of the NA61/SHINE experiment are studied for charged hadrons based on their specific energy loss in the TPCs and for strange hyperons via their weak decay topology. These basic capabilities of the NA61/SHINE experiment are the key ingredients to study collective effects in charged and strange hadron production in Pb-Pb collisions at the SPS energies.

Primary author(s): GROBOV, Alexey (NRNU MEPhI)

Co-author(s): Dr. SELYUZHENKOV, Ilya (GSI - Helmholtzzentrum fur Schwerionenforschung GmbH (DE)); Dr. ZYZAK, Maksym (GSI, Frankfurt U., Inst. Kernphys.); Mr. PARFENOV, Peter (NRNU MEPHI); Mr. KLOCHKOV, Viktor (GSI Helmholtzzentrum für Schwerionenforschung)

Presenter(s): GROBOV, Alexey (NRNU MEPhI)

Session Classification : Poster session and coffee&reception