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TITLE: **Production of identified particles in p–Pb  
collisions at  $\sqrt{s_{NN}} = 5.02$  TeV measured with  
ALICE**

DATE: Tue 10/06/2014 11:00

PLACE: Main Auditorium

## ABSTRACT

Transverse momentum distributions of identified particles have been measured in several multiplicity classes in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV. This measurement can shed light on the understanding of possible collective effects in high multiplicity events. Furthermore p-Pb collisions bridge the charged multiplicity gap between pp and low multiplicity Pb–Pb collisions. Studying the particle production in this region can improve the understanding of the underlying production mechanisms. Particles are reconstructed with the central barrel detectors over a wide transverse momentum range (from 0 up to 15 GeV/c), exploiting different identification techniques.

Primary charged particles (pions, kaons, protons, antiprotons, deuterons and anti-deuterons) are identified by their specific energy loss ( $dE/dx$ ) and time-of-flight. Weakly decaying particles are identified by their characteristic decay topology. Particle-production yields, spectral shapes and particle ratios have been measured in several multiplicity classes. Comparisons with models and results obtained in Pb-Pb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV and pp collisions at 7 TeV at the LHC will be presented.