Abstract Submitted
for the NWS14 Meeting of
The American Physical Society

**Gluon Saturation Effects on Three-particle Angular Correlations in p-p and p-Pb collisions at LHC** SENER OZONDER, University of Washington — The di-hadron correlations from the CMS experiment for the high multiplicity p-p and p-Pb collisions at LHC revealed a ridge structure that looked like the ridge induced by collective flow in A+A collisions. This discovery attracted great interest since the formation of quark gluon plasma (QGP) and collective flow were not anticipated in p-p and p-Pb collisions. It has been recently shown that the p-p and p-Pb ridge can be explained by the multiladder QCD diagrams ("glasma diagrams") that were enhanced at the saturation scale at small x. In this framework, the ridge is purely due to the interference of the wave functions of the colliding hadrons/nuclei and the saturation effects encoded in the wave functions. We calculate tri-hadron correlations from the glasma diagrams for p-p ($\sqrt{s}$ =7 TeV) and p-Pb ($\sqrt{s}$ =5.02 TeV) collisions at LHC. We make quantitative predictions on the associated hadron yield for the high multiplicity events, which have yet to be measured by the experimental collaborations. Our results show that the glasma diagrams give rise to the structures in the three-hadron correlation which are clearly distinguishable from the possible QGP medium effects such as collective flow, energy loss and deflection of hadrons.

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Date submitted: 22 Mar 2014 Electronic form version 1.4