



Contribution ID: 33

Type: **Experimental**

## Recent results on event-by-event fluctuations in ALICE at LHC

*Thursday 25 September 2014 10:35 (20 minutes)*

Non-statistical event-by-event fluctuations in relativistic heavy ion collisions have been proposed as probe of phase instabilities near the QCD phase transition. In a thermodynamical picture of the strongly interacting system formed in heavy-ion collisions, the fluctuations of the mean transverse momentum, mean multiplicity, balance function, net-particle higher moments etc. are related to the fundamental properties of the system, hence they may reveal information about the QCD phase transition. In this presentation, we will discuss the recent results on event-by-event measurements at LHC energies. We will also make comparisons to the lower energy measurements, and discuss the status and prospects for the higher moment studies at ALICE.

**Author:** JENA, Satyajit (University of Houston (US))

**Presenter:** JENA, Satyajit (University of Houston (US))

**Session Classification:** Session 7

**Track Classification:** Correlations and fluctuations