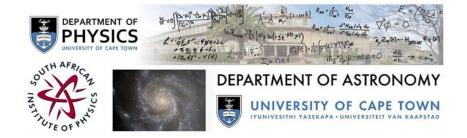Contribution ID: 66   Type: **Oral Presentation**

Radial Flow in Non-Extensive Thermodynamics and Study of Particle Spectra at LHC in the Limit of Small $q - 1$

Friday, 8 July 2016 14:40 (20 minutes)

Abstract content
   (Max 300 words)
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We expand the Tsallis distribution in a Taylor series of powers of $(q - 1)$, where q is the Tsallis parameter, assuming q is very close to 1. This helps in studying the degree of deviation of transverse momentum spectra and other thermodynamic quantities from a thermalized Boltzmann distribution. After checking thermodynamic consistency, we provide analytical results for the Tsallis distribution in the presence of collective flow up to the first order of q-1. The formulae are compared with the experimental data.

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