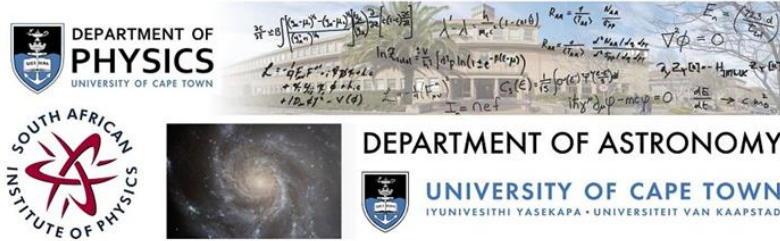


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Contribution ID : 66

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

Friday 08 Jul 2016 at 14:40 (00h20')

Abstract :

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.

Award :

No

Level :

N/A

Paper :

Yes

Permission :

Yes

Primary authors : Dr. BHATTACHARYYA, Trambak (University of Cape Town)

Co-authors : Prof. CLEYMANS, Jean (University of Cape Town) ; Prof. SAHOO, Raghunath (Department of Physics, School of Basic Science, Indian Institute of Technology Indore, MP 452017, India) ; Mr. KHUNTIA, Arvind (Department of Physics, School of Basic Science, Indian Institute of Technology Indore) ; Mrs. PAREEK, Pooja (Department of Physics, School of Basic Science, Indian Institute of Technology Indore.)

Presenter : Dr. BHATTACHARYYA, Trambak (University of Cape Town)

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