



Contribution ID: 70

Type: **Poster Presentation**

Systematic Properties of the Tsallis Distribution: Energy Dependence of Parameters in High-Energy p-p Collisions

Wednesday, 10 July 2013 17:40 (1 hour)

**Abstract content
 (Max 300 words)**

Changes in the transverse momentum distributions with beam energy are studied using the Tsallis distribution as a parameterization. The dependence of the Tsallis parameters q , T and the volume are determined as a function of beam energy. The Tsallis parameter q shows a weak but clear increase with beam energy with the highest value being approximately 1.15. The Tsallis temperature and volume are consistent with being independent of beam energy within experimental uncertainties.

**Apply to be
 considered for a student
 award (Yes / No)?**

No

**Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?**

Yes

Primary author: Prof. CLEYMANS, Jean (University of Cape Town)

Presenter: Prof. CLEYMANS, Jean (University of Cape Town)

Session Classification: Poster2

Track Classification: Track B - Nuclear, Particle and Radiation Physics