



Contribution ID: 64

Type: **Theory**

Non-extensive Thermodynamical Approach of Hadronization in High-Energy Collisions

Saturday 27 September 2014 08:30 (20 minutes)

Hadron spectra measured in high-energy collisions present distributions which can be derived from the non-extensive statistical and thermodynamical phenomena [1,2]. Based on earlier theoretical developments, it seems, the methods are very applicable for jets hadronization processes in electron-positron, proton-proton, and even in heavy-ion collisions [3,4]. Here in this talk, I would like to summarize the theoretical background of this approach, then present what can we learn from the recent theoretical and phenomenological developments. Finally will also give the physical interpretations of the parameters can be measured via analysing measured hadron spectra.

References:

- [1] T.S. Biró, G.G. Barnaföldi, P. Ván: Eur.Phys.J. A49 (2013) 110
- [2] T.S. Biro, G.G. Barnaföldi, P. Van: arXiv:1405.3813
- [3] K. Ürmösy, G.G. Barnaföldi, T.S. Bíró: Phys.Lett. B718 (2012) 125-129
- [4] K. Ürmösy, G.G. Barnaföldi, T.S. Bíró: Acta Phys.Polon.Supp. 5 (2012) 363-368

Author: BARNAFOLDI, Gergely (Hungarian Academy of Sciences (HU))

Co-authors: UERMOESSY, Karoly (Hungarian Academy of Sciences (HU)); VÁN, Peter (Wigner RCP); BIRO, Tamas Sandor (MTA Wigner RCP)

Presenter: BARNAFOLDI, Gergely (Hungarian Academy of Sciences (HU))

Session Classification: Session 11