PROCEEDINGS OF SCIENCE

ROUND TABLE DISCUSSION
Fluctuations in nuclear collisions

Scientific Secretary: Carlos Pajares
Universidade de Santiago de Compostela, Spain
E-mail: pajares@fpaxp1.usc.es

The 2nd edition of the International Workshop — Correlations and Fluctuations in Relativistic Nuclear Collisions —
July 7-9 2006
Galileo Galilei Institute, Florence, Italy

 http://pos.sissa.it/

PoS(CFRNC2006)030

T. Trainor: I point out that the formula $w = w^{+}\frac{n^{+}}{n} + w^{-}\frac{n^{-}}{n} + w^{+-}2\sqrt{\frac{n^{+}n^{-}}{n}}$ explains the difference between w^{+} and w charged.

M. Gorenstein: Grand canonical ensamble reduces w^{+} and w^{-} but not w^{+-}, so there are different answers to global charge conservation.

T. Trainor: Mitchel presented a correlation lenth from the STAR data which is very small. What is the meaning of that?. On the other hand, this correlation length was considered in rapidity space. I think that also should be considered in azimuthal space to see whether there is a continuation of a small correlation length. In general the culture of looking at rapidity should be corrected to look also at azimuthal space. An example of that is the minijet correlation found by STAR on transverse momentum fluctuations looking at both spaces.

R. Stock: Coming back to k/π fluctuations. Are there some dynamical predictions for that?

M. Gadnicki: The fluctuations on the energy density can be translated into larger k/π fluctuations from the dependence of the ratio k/π on the energy. F. Bellatini is now studying this point.

M. Gorenstein: The normalized variance of multiplicity distributions are measured for the number of projectile participants and the fluctuations measured, including the non monotonic shape, to a large extent are the fluctuations on the number of target participants. This fact should be taken into account in the comparison of data with models.

R. Stock: I claim event-by-event analysis to identify clusters, doing momentum analysis.

B. Tomasik: It is not easy to see clusters due to the large multiplicity distributions.