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Deconfinement and Clustering of color sources in pp and A-A collisions at LHC energies.

We present the extraction of the temperature by analyzing the charged particle transverse momentum spectra in lead-lead (Pb-Pb) and proton-proton (**pp**) collisions at LHC energies from the ALICE Collaboration using the Color String Percolation Model (CSPM) [1]. From the measured energy density ε and the temperature T the dimensionless quantity ε/T^4 is obtained to get the degrees of freedom (DOF), ε/T^4 = DOF $\pi^2/30$.

We observe for the first time a two-step behavior in the increase of DOF, characteristic of deconfinement, above the hadronization temperature at temperature $\sim$ 210 MeV for both Pb-Pb and **pp** collisions and a sudden increase to the ideal gas value of $\sim$ 47 corresponding to three quark flavors in the case of Pb-Pb collisions.

[1].M. A. Braun, J. Dias de˜Deus, A. S. Hirsch, C. Pajares, R. P. Scharenberg, and B. K. Srivastava, Deconfinement and clustering of color sources in nuclear collisions, Phys. Rep. 599, 1 (2015).

Primary author: Dr SRIVASTAVA, Brijesh (Purdue University)

Co-authors: PAIC, Guy (Universidad Nacional Autonoma (MX)); PAJARES, carlos (University Santiago de Compostela); Prof. SCHARENBERG, R (Purdue University); MISHRA, Aditya Nath (Wigner Research Centre for Physics Budapest, Hungary)

Presenter: Dr SRIVASTAVA, Brijesh (Purdue University)

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