

## **K0sK0s correlations in 7 TeV proton+proton collisions from the ALICE experiment at the LHC**

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Identical neutral kaon pair correlations are measured in 7 TeV proton+proton collisions in the ALICE experiment. Neutral kaons are identified from their decay into  $\pi^+\pi^-$  pairs. K0sK0s correlation functions are formed in 4 multiplicity  $\times$  4 kT bins. The kaon source parameters  $R_{inv}$  and  $\lambda$  are extracted from these correlation functions by fitting a Gaussian\*PYTHIA model to them, the Gaussian describing the Bose effect and PYTHIA accounting for the non-flat baseline found in proton+proton collisions. PYTHIA with the Perugia-0 tune is seen to describe well the dependence of the baseline shape of the K0sK0s correlation function on multiplicity-kT bin in the  $Q_{inv}$  fitting range used of 0-1 GeV. Corrections to source parameters from the Lednicky model for the  $a_0/f_0$  resonance are made and found to be large. K0sK0s correlations show a systematic increase in  $R_{inv}$  for increasing multiplicity bin and decreasing  $R_{inv}$  for increasing kT bin as seen in  $\pi\pi$  correlations in the proton+proton system, as well as seen in heavy-ion collisions. Also, K0sK0s correlations are observed to more or less "smoothly" extend this  $\pi\pi$   $R_{inv}$  behavior for the proton+proton system to  $\sim 3$  times higher kT than the kT range measured in  $\pi\pi$  correlations.

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