

Abstract Submitted
for the TSF21 Meeting of
The American Physical Society

Two Particle Correlations of Neutral and Charged Kaons in heavy-ion collisions ANJALY SASIKUMAR MENON, University of Houston, ALICE COLLABORATION — Measurements of two particle correlations are sensitive to several characteristics of the medium created in heavy ion collisions. Looking at the correlations of charged and neutral kaons might provide information about the potential formation of disoriented chiral condensates (DCCs). Previous ALICE measurements have indeed shown a strong anti-correlation between charged and neutral kaons, which is qualitatively consistent with the formation of DCCs. The initial goal of this analysis is to perform charged and neutral kaon identification with high purity using the ALICE detector. Once the neutral and charged kaons are cleanly identified, they can be used to construct the two-particle correlation function. We will show measurements of a more differential analysis of these correlations as function of $\Delta\Phi$ and $\Delta\eta$ from Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV.

Anjaly Sasikumar Menon
University of Houston

Date submitted: 23 Sep 2021

Electronic form version 1.4