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Search for long range angular correlations in high-multiplicity $p+p$ collisions at $\sqrt{s} = 200$ GeV from PHENIX QIAO XU, Vanderbilt Univ, PHENIX COLLABORATION — Long range angular correlations have been found in $d+Au$ and ^3He+Au collisions at RHIC energies, and in $p+p$ and $p+A$ collisions at LHC energies. To have a better understanding of whether quark-gluon plasma could be formed and collective behavior could arise in small systems motivates this study to see if such correlations also exist in $p+p$ collisions at RHIC energies. With the implementation of a high-multiplicity trigger using the forward silicon detector(FVTX), the PHENIX collaboration has taken several hundred million high-multiplicity events for $p+p$ collisions at $\sqrt{s} = 200$ GeV. In this talk we present the current status of two-particle angular correlation studies for charged hadrons emitted in $p+p$ collisions at a center-of-mass energy of 200 GeV. Charged particle multiplicity and transverse momentum dependence of correlations are discussed.

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