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Baseline study for Chiral Symmetry Restoration using the Hadron Blind Detector in the PHENIX Experiment SKY ROLNICK, University California, Riverside — Measurement of the dielectron spectrum in p-p collisions at sqrt(s)=200GeV will be presented as a baseline study of Chiral Symmetry Restoration using the Hadron Blind Detector for the PHENIX experiment. Dielectrons offer us an ideal probe for studying "medium" modifications of vector mesons due to their color neutrality. Large combinatorial backgrounds, primarily from Dalitz decays and conversion pairs, limit the feasibility of such measurements. The Hadron Blind Detector has been specifically designed to rule out these backgrounds and offers a rejection factor of background of several orders of magnitude. In this study I will present various clustering algorithms and their behavior in high multiplicity environments such as central AuAu collisions as well as their expected rejection factors. This work should pave the road for very clean measurements of the dielectron continuum within the PHENIX experiment in the near future.

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