

What can we learn from eta production in proton-proton collisions at PHENIX?

Despite the relatively large production rate of the eta meson and its ease of detection, an extraction of the eta fragmentation functions (FF's) has only been performed recently, utilizing not only world $e+e-$ data but also PHENIX p+p cross section measurements. With FF's available, pQCD calculations can be performed to predict cross section measurements out to higher p_T , and information on polarized distribution functions can be extracted from double-helicity asymmetry measurements for eta production in polarized proton-proton collisions. Experimental results from PHENIX will be compared to calculations, and the relationship of the eta to the π^0 will be discussed.