

Abstract Submitted  
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**Particle identification for RHIC's Energy Scan**<sup>1</sup> ABHILASH NAIR,  
University of Illinois at Chicago, STAR COLLABORATION — In an effort to  
search for a possible critical point of the QCD phase transition between Quark-  
Gluon Plasma and hadronic matter, the Relativistic Heavy Ion Collider (RHIC) has  
conducted an energy scan, taking Au+Au data at multiple collision energies in 2010.  
In this talk we will discuss the experimental technique employed for identification of  
pions, kaons, and (anti)proton at low transverse momenta ( $<1$  GeV/c) with STAR  
Time Projection Chamber (TPC) detector. To explore antiparticle to particle ratios,  
and their evolution with beam energy, various aspects of data analysis and quality  
assurance will be discussed with regard to this topic.

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