The Laser Calibration System for Time Projection Chamber at STAR Experiment.

A.Lebedev [a] for the STAR Collaboration

[a] *Brookhaven National Laboratory*

Presented by: A. Lebedev

Abstract

A high precision laser calibration system has been build for big Time Projection Chamber(TPC)- the core tracking detector for the STAR experiment at RHIC. The calibration system uses a novel design of small mirror bundles to create 500 thin laser beams. These beams simulate straight charge particles tracks in the TPC volume. The new approach is significantly simpler than traditional ones, and provides a higher TPC coverage at reduced cost. System design, test measurements and results from RHIC 2000 summer run are presented.