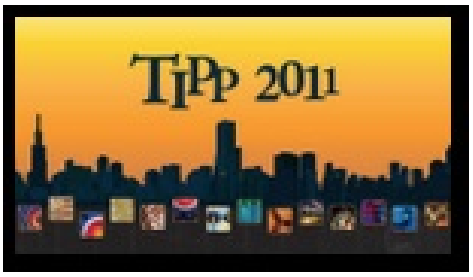

Contribution ID: **197** Type: **Oral Presentation**

Performance and Operational Experience of the CDF Luminosity Monitor

Monday, 13 June 2011 14:25 (25 minutes)

We describe performance of the detector used for luminosity measurements in the CDF experiment in Run 2 at the Tevatron. The detector consists of low-mass gaseous Cherenkov counters with high light yield (about 100 photo-electrons) and monitors the process of inelastic proton-anti-proton scattering. This detector allows for several methods of precise luminosity measurements at peak luminosities of up to 4 \times 10^32 cm^{-2}s^{-1}, which corresponds to an average of 12 proton-anti-proton interactions per bunch crossing. During almost 10 years of the Tevatron Run 2 CDF Luminosity monitor is proved to be very stable and reliable detector and provided luminosity measurements for all physics results from CDF.

Primary author: SUKHANOV, Alexander (Fermilab)

Presenter: SUKHANOV, Alexander (Fermilab)

Session Classification: Machine Det. Interface and Beam Instr.

Track Classification: Machine Detector Interface and Beam Instrumentation