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POZVÁNKA

na 292. seminář ÚTEF ČVUT v Praze
pod záštitou Československé sekce NPSS IEEE

Aspects of 2015 TPX Luminosity Measurements

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and

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Abstract: A network of TPX detectors installed in the ATLAS cavern measures the LHC luminosity as a function of time as a stand-alone system. The data were recorded from 13 TeV proton-proton collisions in 2015. Using two TPX devices, the number of hits created by particles passing the pixel matrices were counted. A van der Meer scan of the LHC beams was analysed using bunch-integrated luminosity averages over the different bunch profiles for an absolute approximate luminosity normalization. It is demonstrated that the TPX network has the capability to study the reduction of LHC luminosity with precision. Comparative studies were performed among four sensors (two layers in each TPX device) and the luminosity measurement precision was determined to be 0.1% for 10 s time intervals. The internal long-term time stability of the measurements is about 0.4% for the data-taking period.

Seminář se bude konat v úterý **25. října 2016** ve 14 h
v zasedací místnosti ÚTEF ČVUT, Praha 2 - Albertov, Horská 3a/22.

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