Contribution ID : **100** Type : **not specified**

Development of scanning technique for a NSW chamber production quality control for the ATLAS upgrade

Wednesday, 7 October 2015 13:45 (15)

A New Small Wheel (NSW) is a new innermost part of the ATLAS muon end-cap system which will be installed in the ATLAS detector during forthcoming Phase-I upgrade of the Large Hadron Collider at CERN. It consists of small-strip Thin Gap Chambers (sTGC) and Micromegas chambers which were designed to sustain large particle fluxes during Super LHC operation. In order to ensure a high production quality of NSW chambers a method which uses X-ray irradiation scanner is proposed. The scanning technique offers identification of the technological defects which are vital for the chamber operation at high particle rate before the installation to the detector.

Presentation type

Section talk (10+5 min)

Primary author(s) : Dr. TETERIN, Peter (National Research Nuclear University "MEPhI")

Co-author(s) : Dr. ROMANIOUK, Anatoli (NRNU MEPhI, CERN); SHCHUKIN, Dmitry (NRNU MEPhI); Dr. MIKENBERG, George (CERN, Weizmann Institute of Science); Mr. FILIPPOV, Konstantin (National research nuclear university «MEPhI»); Mr. SHOA, Meir (Weizmann Institute of Science); Mr. SMIRNOV, Serge (NRNU MEPhI); Dr. SOSNOVTSEV, Valery (NRNU MEPhI); Prof. SMAKHIN, Vladimir (Weizmann Institute of Science); Dr. TIKHOMIROV, Vladimir (P.N.Lebedev Physical Institute, Russian Academy of Sciences); Mr. TSEKHOSH, Vladimir (P.N.Lebedev Physical Institute, Russian Academy of Sciences)

Presenter(s) : Dr. TETERIN, Peter (National Research Nuclear University "MEPhI")

Session Classification : Nuclear physics and particle physics - parallel V

Track Classification : Nuclear physics and particle physics