Acceptance tests of Fast Interaction Trigger modules for the upgrade of the ALICE experiment RYAN STEMPEK, ISAIAH MORGAN, Chicago State University, YURY MELIKYAN, National Research Nuclear University of Moscow, MACIEJ SLUPECKI, University of Jyvaskyla, AUSTIN HARTON, EDMUNDO GARCIA-SOLIS, Chicago State University, FIT-ALICE COLLABORATION — CERN (European Center for Nuclear Research) is a global laboratory devoted to proton and heavy-ion collisions at the Large Hadron Collider (LHC). ALICE (A Large Ion Collider Experiment) is one of four major experiments at the LHC. ALICE is dedicated to the study of the transition of matter to Quark-Gluon Plasma in heavy-ion collisions. In Run 1 and 2, ALICE used several sub-detectors to provide, for instance, minimum bias trigger, multiplicity trigger, beam-gas event rejection, precise collision time, online vertex, multiplicity, and event plane determination. For Runs 3 and 4, the former Forward Detectors will be replaced by the Fast Interaction Trigger (FIT) system. In this talk, we will be discussing two of the six characterization parameters and sample performance results of the Micro Channel Plate (MCP) based photosensor modules designed for the FT0 Cherenkov array of FIT. These MCP module tests are taking place at CERN, and the two of interest for this talk include the After-pulse Ratio and Dark Current Rate, along with the Quantum Efficiency for Cherenkov Light. This work is partially supported by the National Science Foundation under Grants No. NSF-PHY-1613118, NSF-PHY-1625081, and NSF-PHY-1719759.

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