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Status of the ALICE Fast Interaction Trigger (FIT) Hardware and Simulations[1] JOSEPH CROWLEY, California Polytechnic University — The ALICE experiment at the Large Hadron Collider studies collisions of relativistic heavy ions to learn about matter with the highest energy densities in the universe: the quark-gluon plasma. The Fast Interaction Trigger (FIT) is a detector upgrade that will determine the minimum bias trigger, event multiplicity, centrality, collision time, event plane, and beam luminosity for ALICE. Simulations to estimate the efficiency and acceptance of ALICE detectors are implemented in the Online-Offline Oˆ2 computing framework. This summer, the FIT T0 (FT0) detector geometry was developed in ROOT for Oˆ2 Monte-Carlo simulations, including the aluminum frame that holds the FT0 detector, which will contribute to the backgrounds for other detectors due to photon conversion and secondary particle production. Hardware for the FT0 C-side was assembled and tested at CERN, and it is now ready for installation. This talk will present the status of the hardware and software for the FIT T0 detector that will be used in the LHC for Run 3.

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