Abstract Submitted for the PSF20 Meeting of The American Physical Society

NuMI Beam Monitoring Simulation and Data Analysis YIDING YU, PAVEL SNOPOK, Illinois Institute of Technology, KATSUYA YONEHARA, ATHULA WICKREMASINGHE, Fermi National Accelerator Laboratory, AMIT BASHYAL, Oregon State University, NILAY NILAY BOSTAN, University of Iowa, TOM TOM CARROLL, University of Wisconsin, NOVA COLLABORATION — With the Main Injector Neutrino Oscillation Search (MINOS) experiment decommissioned, muon and hadron monitors became an important diagnostic tool for the NuMI Off-axis v_{μ} Appearance (NOvA) experiment at Fermilab to monitor the Neutrinos at the Main Injector (NuMI) beam. The goal of this study is to maintain the quality of the monitor signals and to establish correlations with the neutrino beam profile. We report here on the progress of the beam data analysis and comparison with the simulation results.

> Yiding Yu Illinois Institute of Technology

Date submitted: 30 Oct 2020

Electronic form version 1.4