

Abstract Submitted
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Measurement of the Neutrino Velocity in MINOS IOANA MARIA ANGHEL, Iowa State University/ Argonne National Lab — The MINOS experiment uses two neutrino detectors separated by 734km between Fermilab and the Soudan Underground Laboratory. Two measurements of the neutrino time of flight were conducted between the two detectors. The first analysis extended the initial MINOS measurement based on one year of data published in 2007. This analysis benefited from the statistics accumulated during 6 years of data taking. The second analysis was done using the data collected during 2012 making use of a new system of clocks which provided a more precise measurement of time at the primary proton target, the Near and the Far detectors. Using the resulting neutrino time of flight between the MINOS detectors we present an improved neutrino velocity measurement.

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