

Abstract Submitted  
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**Seasonal Variations of multiple-muon events with the NOvA Near Detector** MAURY GOODMAN, Argonne Natl Lab, NOVA TEAM — Due to Temperature variations in the upper atmosphere, underground detectors measure more cosmic ray muons in the summer than the winter. MINOS unexpectedly measured the opposite situation for multiple-muon events. The underground NOvA Near Detector has confirmed the MINOS observation and studied the effect as a function of zenith angle, muon separation and multiplicity. Ideas to understand this effect will be presented.

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