

## Studying Muon Events Within SNO+

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SNO+ is a liquid organic scintillator detector aiming to study neutrinos, which is now completely full of scintillator with the addition of wavelength shifter having been completed.

Within SNO+, there are particles that get tagged as muons by two main criteria. They have large nHit values (the number of hit PMTs per event) and a high number of OWL (OutWard Looking PMT) hits. When a muon is detected, livetime is lost due to the fact that an event occurred. For each muon that occurs, 20s of time is lost. It is worthwhile to look at these so called “muon events”, because they can help to get a better understanding of the detector. It can also lead to explanations as to what some of these muon events actually are.

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