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**The supernova neutrino readout of MicroBooNE** JOSE IGNACIO CRESPO ANADON, Columbia Univ Nevis Lab, MICROBOONE COLLABORATION — The MicroBooNE detector is currently the largest liquid argon time projection chamber (LArTPC) operative worldwide. In the case of a nearby (a few kiloparsecs away) core-collapse supernova, the emitted neutrinos would induce on the order of tens of interactions within the MicroBooNE TPC. This would constitute the first detection of supernova neutrinos with the LArTPC technology, offering a unique sensitivity to the electron neutrino flux. Due to the low energy of the events (tens of MeV), the detector size (89 tons of active volume) and the location near surface, MicroBooNE cannot trigger on supernova neutrinos and therefore relies on an external alert generated by other neutrino detectors (the SuperNova Early Warning System, or SNEWS). A continuous readout is being commissioned in MicroBooNE in which the data are temporarily stored in buffers, waiting for the SNEWS alert to save them permanently. In order to cope with the large data rate produced by the TPC and the PMT systems, online zero-suppression algorithms have been developed. This talk will explain the continuous supernova readout of MicroBooNE, which is of interest to the future short and long baseline neutrino programs which will bring additional LArTPCs online in the coming years.

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