

Abstract Submitted
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Doping the MicroBooNE LArTPC With Radon IVAN LEPETIC,
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— We present a plan to dope MicroBooNE, an 85-ton active-volume liquid argon
time projection chamber (LArTPC) located at Fermilab, with radon. MicroBooNE
has been successfully detecting \sim GeV energy neutrinos from the Booster Neutrino
Beam since 2015, however few studies have been performed at MeV energies. The
associated decay activity from the radon will allow us to study detector properties
not easily accessible at higher energies, namely MeV-scale energy resolution and
electron diffusion. Such studies are especially important for the Deep Underground
Neutrino Experiment (DUNE), a multi-kiloton-scale, next-generation long-baseline
experiment and its low-energy physics goals, such as supernova neutrino reconstruc-
tion. This talk will present an overview of the doping program, its goals and its
benefits to future LArTPCs.

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