

Abstract Submitted
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Unconventional backgrounds in nEXO VENKATESH VEER-
ARAGHAVAN, Univ of Alabama - Tuscaloosa — The next-generation En-
riched Xenon Observatory (nEXO) is a planned experiment utilizing 5 tonnes of
isotopically-enriched liquid xenon in a time projection chamber (TPC) to search for
neutrinoless double beta decay of ^{136}Xe . The large, monolithic design of the nEXO
TPC provides excellent shielding from the dominant background source - γ rays
that originate from external materials. With an exceptionally clean central region
of the TPC, we need to consider and quantify backgrounds that have previously
been considered to be small relative to backgrounds from γ rays. I will present re-
cent studies of two of these unconventional background sources - various low-energy
neutron sources and ^{42}Ar in enriched liquid xenon.

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