Abstract Submitted
for the APR21 Meeting of
The American Physical Society

nEXO Cleanliness Control RAYMOND HEI MAN TSANG, University of Alabama, NEXO COLLABORATION — nEXO is a next-generation experiment searching for neutrinoless double beta decay of ^{136}Xe using a liquid Xe time projection chamber (TPC). It is projected to reach a half-life sensitivity of about 10^{28} years with 10 years of exposure time. To achieve this sensitivity, stringent limits on radioactivity are necessary to control backgrounds to a sufficiently low level. While detector construction materials contribute most to the background budget, dust particulates that are deposited on the materials also contribute substantially if they are not properly removed. Specifically, they contribute through their intrinsic U and Th impurities in addition to the out-gassed radon. This talk will discuss our current plans on the estimation, measurement, and mitigation of dust induced backgrounds.

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Date submitted: 07 Jan 2021 Electronic form version 1.4