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Progress in Ba tagging for nEXO: Imaging of single Ba atoms in solid xenon

The identification, or "tagging", of the 136Ba daughter atom that results from double beta decay of 136Xe is a promising technique for elimination of all backgrounds in the nEXO 136Xe double beta decay experiment. Possible methods for extracting and detecting a single 136Ba daughter atom from the nEXO enriched liquid xenon detector will be discussed. Progress on Ba tagging for the nEXO experiment is reported. This includes imaging of single Ba atoms trapped in solid xenon.

Authorship annotation

for the nEXO Collaboration

Session and Location

Monday Session, Poster Wall #33 (Auditorium Gallery Right)

Poster included in proceedings:

yes

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Track Classification: Poster (not participating in poster prize competition)