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Do NOT use your browser's Back button.**APS April Meeting 2016****Authors**

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Yun Zhang
Columbia University**Measurement of the Charge and Light Yield of Low Energy Nuclear Recoils in Liquid Xenon at Different Electric Fields**

We acknowledge continued support of the XENON Dark Matter program at Columbia University by the National Science Foundation

A12 - A12. Elementary Particles/Dark Matter

E - Experimental

ORAL

Dual-phase liquid xenon detectors continue to lead in the search for the direct detection of dark matter.

Characterization of the response of liquid xenon to low energy (≤ 20 keV) nuclear recoils is essential to establish the sensitivity of these detectors to dark matter. The neriX detector at Columbia University is a dual-phase time projection chamber that is optimized for simultaneous measurements of light and charge from these low-energy interactions. A coincidence technique is employed to extract the light and charge yield from nuclear recoils in liquid xenon as a function of energy deposited and applied electric field. In this talk, we will present preliminary results from the light and charge yield measurements.**Submitter**Matthew Anthony
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