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## Investigation of Two-Phase Xenon Detectors with PIXeY

*Friday, 22 September 2017 10:00 (15 minutes)*

The Particle Identification in Xenon at Yale (PIXeY) experiment is a small, two-phase (liquid and gas) xenon detector. PIXeY has been designed and built to investigate and optimize properties of this class of detectors with an applied drift field of 0.5 to 2.0 kV/cm and an extraction field as high as 13.3 kV/cm in the xenon gas. This talk will discuss analyses of data collected from PIXeY concerning LXe energy resolution, electron extraction efficiency, and response to low-energy electron recoils from  $^{37}\text{Ar}$  and  $^{83\text{m}}\text{Kr}$ .

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