Yale University

The McKinsey Research Group

Publications

Liquid Xenon

- A $^{83}$Kr$^m$ Source For Use in Low-Background Liquid Xenon Time Projection Chambers. JINST 5, P05006 (2010). (arXiv)

Other Liquified Noble Gases

- Radon Backgrounds in the DEAP-I Liquid-Argon-Based Dark Matter Detector. Submitted to Astropart. Phys.. (arXiv)
- Operation of a Thick Gas Electron Multiplier (THGEM) in Ar, Xe, and Ar-Xe. JINST 3, P01005 (2008). (arXiv)


LUX

- Radiogenic and Muon-Induced Backgrounds in the LUX Dark Matter Detector. Accepted to Astropart. Phys. (2014). (arXiv)
- First results from the LUX dark matter experiment at the Sanford Underground Research Facility. PRL 112, 091303 (2014). (arXiv)
- Radio-Assay of Titanium Samples for the LUX Experiment. Submitted to NIM (2014). (arXiv)

CLEAN


XENON


Helium Molecules

• Detecting Scintillations in Liquid Helium. JINST 8, C09008 (2013).
• Metastable Helium Molecules as Tracers in Superfluid $^4$He. Phys. Rev. Lett. 102, 235301 (2009).

Miscellaneous

• Scintillation and Charge Yield from the Tracks of Energetic Electrons in Superfluid Helium-4. JINST 7, P01002 (2012). (arXiv)


## Dissertations


• Wade G. Rellergert. *Detecting and Imaging He$_2$ Molecules in Superfluid Helium by Laser-Induced Fluorescence.* (2008)