

Abstract Submitted  
for the DNP10 Meeting of  
The American Physical Society

**Construction of the Large-area multi-Institutional Scintillator Array (LISA) Neutron Detector**<sup>1</sup> KAITLYNNE RETHMAN, KIMBERLY PURTELL, AUTUMN HAAGSMA, Central Michigan University, CASEY DEROO, MEGAN JACOBSON, Concordia College, STEVE KUHN, Earlham College, ALEXANDER PETERS, Gettysburg College, TIM NAGI, Hope College, SAM STEWART, ZACK TORSTRICK, MATHIEU NDONG, Indiana University South Bend, ROB ANTHONY, HENGZHI CHEN, ALEX HOWE, Ohio Wesleyan University, NICHOLAS BADGER, MATTHEW MILLER, Rhodes College, BRAD VEST, BEN FOSTER, LOGAN RICE, Wabash College, ALEGRA AULIE, AMANDA GROVOM, PHILIP KASAVAN, LEWIS ELLIOTT, Westmont College, MONA COLLABORATION — The Large-area multi-Institutional Scintillator Array (LISA) will detect high-energy neutrons in experiments with fast rare isotopes. The LISA allows for the study of unbound nuclei as well as many unknown higher-lying unbound states in light neutron-rich nuclei ( $Z < 9$ ). Nine primarily undergraduate institutions designed, proposed, and constructed this highly efficient large-area neutron detector that uses an array of 144 individual plastic scintillators to produce a position sensitive system with multi-hit capability. The construction process and characteristics of the detector will be presented.

<sup>1</sup>Work supported by the National Science Foundation.

Kaitlynne Rethman  
Central Michigan University

Date submitted: 27 Jul 2010

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