

Abstract Submitted  
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**Orientation of the adiabatic demagnetization refrigerator in the Micro-X sounding rocket**<sup>1</sup> KAITLYN YOHA, Duquesne University, TAREK SAAB, University of Florida, TYLOR WHITMER, PATRICK WIKUS, Kavli Institute for Astrophysics and Space Research, Massachusetts Institute of Technology — The Micro-X sounding rocket is a small rocket equipped with an X-ray telescope and will be launched in 2011. For the telescope to function properly, the adiabatic demagnetization refrigerator (ADR) must be aligned with the optics of the X-ray detectors. During the mission, the ADR will move, thus causing errors. A testing prototype was designed and constructed in the lab to simulate the movement the ADR will experience in flight. This method will monitor the orientation of the ADR relative to the detectors, and allow us to counter the resulting measurement errors.

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