## Abstract Submitted for the MAR13 Meeting of The American Physical Society

Development of a Nb-AlxOy-Nb trilayer process at the University of Washington ANDREW WAGNER, University of Washington, AXION DARK MATTER EXPERIMENT COLLABORATION — We present progress made at the Washington Micro-Fabrication Facility toward the production of SQUID amplifiers from a Nb –  $Al_xO_y$  – Nb trilayer process. Details of a simplified trilayer process are presented and the capability to fabricate 3 micrometer Josephson Junctions from the process with controllable critical current densities is demonstrated. We discuss how these results can be applied to the production of SQUID, SLUG or Josephson Parametric amplifiers operating in the microwave band for the Axion Dark Matter eXperiment (ADMX) located at the University of Washington.

<sup>1</sup>University of Washington MicroFabrication Facility and CENPA

Andrew Wagner University of Washington

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