Abstract Submitted
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In-Situ Noise Temperature Characterization of a SQUID MSA in Axion Dark Matter Experiment (AMDX)[1] CLIFF PLESHA, Univ of Washington, ADMX COLLABORATION — Axions are hypothetical particles proposed to solve the strong CP problem and are also good candidates for cold dark matter. ADMX is an experiment directly searching for axion dark matter converting to photons in a microwave cavity. Superconducting Quantum Interference Device (SQUID) Micro-Strip Amplifiers (MSA) are a key component in the AMDX receiver chain because they introduce only quantum limited noise, maximizing sensitivity to axion signal. I will discuss how ADMX tunes a SQUID MSA to achieve optimum noise performance while in a high magnetic field.

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