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**Instrumentation and Thermal Design of the Axion Dark Matter Experiment (ADMX)**[1] SCOTT MCCULLOCH, Univ of Washington, ADMX COLLABORATION — The axion, a hypothetical elementary particle, may prove to be a component of cold dark matter in the universe. ADMX has been searching for this elementary particle through the conversion of axions into microwave photons in a resonant cavity within a high magnetic field. To maximize sensitivity to the axion signal, the cavity and associated electronics must be cooled to millikelvin temperatures. This talk will discuss the design and performance of the cryogenic system that meets ADMX's unique needs.

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