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The Axion Dark Matter Experiment Receiver Chain¹ LLOYD PA-

SION, University of washington, ADMX COLLABORATION² — The ADMX experiment is a search for axionic dark matter consisting primarily of a microwave cavity immersed in a strong magnetic field. Dark matter axions in the presence of the experiment's magnetic field should resonantly convert into detectable photons in the cavity. The expected power due to the conversion of dark matter axions is very small; to detect the signals above the background thermal noise, ADMX requires a specialized receiver. I will describe the ADMX receiver, tracing the signal path from the microwave cavity to data analysis.

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