

Abstract Submitted  
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**Construction of the Axion Dark Matter Experiment (ADMX) Upgrade**<sup>1</sup> DMITRY LYAPUSTIN, U. of Washington, ADMX COLLABORATION, ADMX-HF COLLABORATION — Axions are hypothetical elementary particles that may help provide the answer as to why QCD preserves the discrete symmetries P and CP. Light axions also have properties that make them ideal dark-matter candidates. The Axion Dark Matter eXperiment (ADMX), has been at the forefront of the search for dark-matter axions for over a decade, and is currently being upgraded to dramatically improve its sensitivity. 2013 is a particularly exciting year for ADMX as construction is nearly complete and we will soon move to commissioning followed by data-taking in the summer. I will begin by motivating the existence of axions, then discuss ADMX and its previous results, and highlight the improvements that have been made to the latest phase of ADMX.

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