## Abstract Submitted for the APR15 Meeting of The American Physical Society

ADMX overview and new limits on axion mass¹ DMITRY LYA-PUSTIN, University of Washington, ADMX 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 over the past few years has undergone upgrades to dramatically improve its sensitivity. 2014 was a particularly exciting year for ADMX as we collected the first production data from this new generation of the experiment. I will discuss the data set, go over the analysis method, and present new exclusion limits on the axion mass.

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