

Abstract Submitted  
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**The ADMX four-cavity array system**<sup>1</sup> GIANPAOLO CAROSI, Lawrence Livermore Natl Lab, ADMX COLLABORATION — The Axion Dark Matter eXperiment (ADMX) is a DOE "Generation 2" direct-detection dark matter project that is currently searching for axions in the 1 GHz ( $4 \mu\text{eV}$ ) mass range. To scan for higher mass (or higher frequency) axions the cavities need to become smaller. However this leads to lower signal as the sampled volume of dark matter decreases. ADMX is in the process of producing a 4-cavity array that will take advantage of the large wavelength nature of the axion and allow the DFSZ search to continue up to 2 GHz ( $8 \mu\text{eV}$ ) and beyond. This necessarily leads to added system complexity. Here I will present an overview of the upcoming ADMX multi-cavity system.

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