

Abstract Submitted  
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**Galactic-halo motivated searches for dark-matter axions with ADMX**<sup>1</sup> MICHAEL HOTZ<sup>2</sup>, U. of Washington — Axions are a compelling cold-dark matter candidate, and the Axion Dark Matter eXperiment (ADMX) is the most sensitive detector for an axion component of the Milky Way’s dark-matter halo. It may well be that our Milky Way’s dark-matter halo is richer and more complicated than the isothermal-sphere approximation assumed in the majority of direct dark-matter searches. These richer, more complicated halo models, as an a priori within the ADMX analysis, could perhaps increase the experiment sensitivity. In this talk I discuss these more complicated halo models and their effect on the ADMX analysis. Some of these halo models include the “caustic ring” and “dark-disk” halos.

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