

# First Results from the ADMX G2 dark matter axion search

*Thursday 5 July 2018 09:00 (20 minutes)*

The axion is a well-motivated dark matter candidate inspired by the Peccei-Quinn solution to the Strong-CP problem. After decades of work, the US DOE flagship axion dark matter search, ADMX G2, is the first experiment to be sensitive to dark matter axions from the plausible DFSZ coupling model, and has begun to search the theoretically-favored axion mass region 2-40 micro-eV. ADMX G2 could now discover dark matter at any time. I will report the first results from exploring the range around 2.7 micro-eV last year, discuss this year's operations and review the ADMX G2 plans to continue the search to cover the entire mass range.

**Primary author:** RYBKA, Gray

**Presenter:** RYBKA, Gray

**Session Classification:** Dark Matter Detection

**Track Classification:** Dark Matter Detection