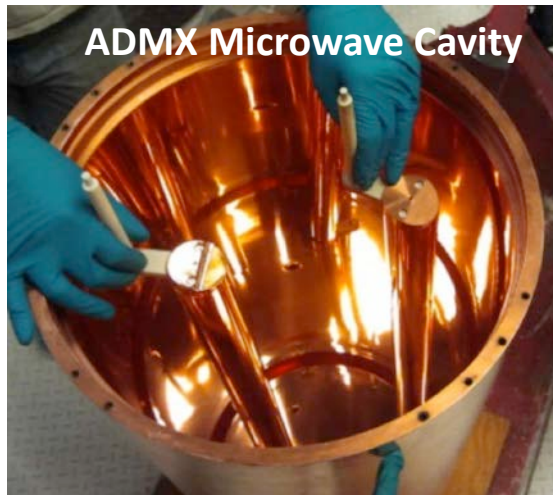
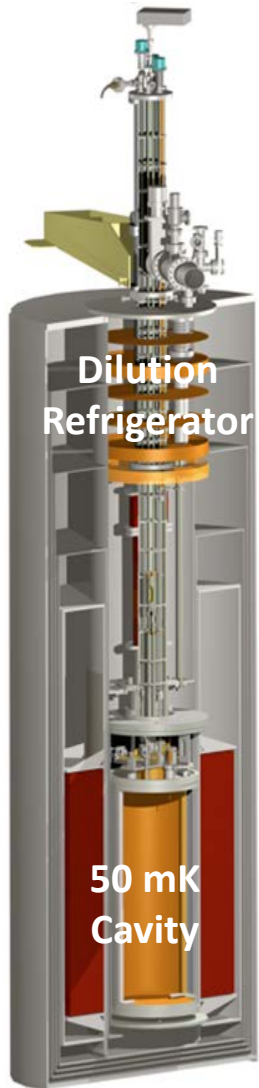


# Axion Dark Matter Experiment (ADMX)

## Research Overview

Development of microwave cavities and quantum detectors to discover axion dark matter from their conversion to microwaves.



## Potential Collaborations

- Photonic Bandgap Cavities
  - Resonant cavities with periodic lattice
  - Higher frequency / larger volume
    - ⇒ Sensitivity to heavier axions
- Hybrid Superconducting Cavities
  - Enhance resonance quality factor with superconducting thin films.
- Microwave Photon Counters
  - Single photon counters provide higher sensitivity above ~10 GHz
- Applications in quantum computing

## Other

ADMX is the only “Generation 2” DOE Dark Matter project focused on axions.

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