

# Microwave-Multiplexed Low-Noise Detectors

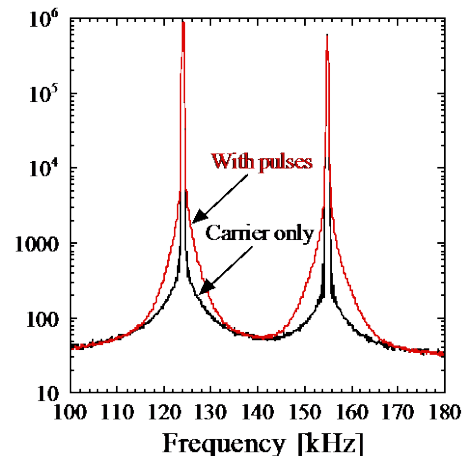
## Research Overview

We build ultra-sensitive quantum sensors and investigate sources of noise at microwave frequencies that limit their performance.

### 10mK Refrigerator



### Microwave multiplexing



## Potential Collaborations

- Sensors for quantum computing
- Single-photon microwave detectors
- Fundamental sources of athermal noise
- Multiplexed readout of large arrays of cryogenic  $\gamma$ -ray detectors
- Increase sensitivity for ultra-high resolution  $\gamma$ -detectors for nuclear assay

## Other

This is a new project driven in part by the need for ultra-low noise in quantum computing and quantum radar.

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