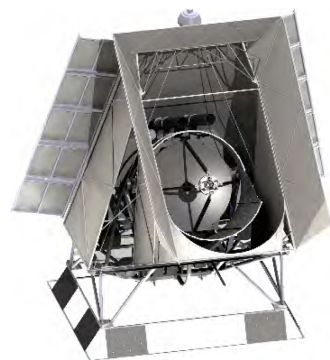


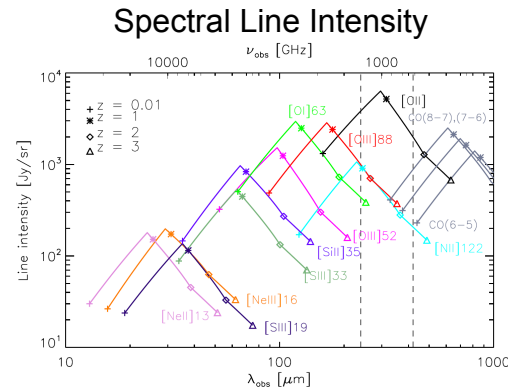
# Kinetic Inductance Detectors for Far-Infrared Spectroscopy

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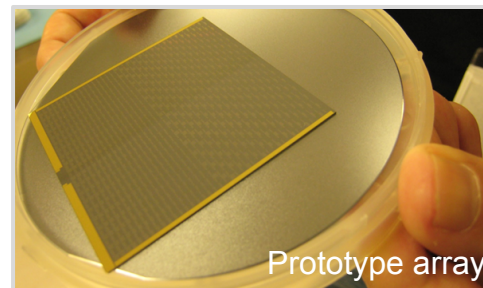
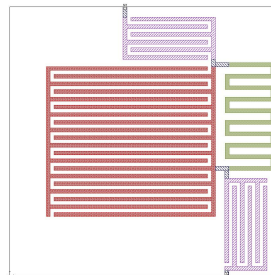
- **Instrument Concept:** Spectroscopic Terahertz Airborne Receiver for Far-Infrared Exploration (STARFIRE)
  - Balloon-based telescope for far-IR spatial-spectral intensity mapping
- **Target Science**
  - Trace star formation in dust-obscured galaxies using spectral lines in the far-infrared
- **Detector technology:** Kinetic Inductance Detectors
  - KIDs: superconducting thin-film LC resonators
  - Design considerations, fabrication process, readout scheme described in poster



Balloon gondola



Pixel schematic



Prototype array