**P19: SOFIA/HAWC+: Upcoming Capability for Detailed Mapping of the Galactic Center Magnetic Field**

- Magnetic fields are very important astrophysically but notoriously difficult to study directly
  - Far infrared emission from magnetically-aligned grains can probe the direction and strength of the aligning field
  - Much of what is known about the Galactic Center magnetic field has been derived from KAO polarimetry with ~20" beams
  - HAWC+, to fly on SOFIA’s 2.7m telescope in 2015, will bring dramatically improved capability:

**HAWC+ Vital Statistics:**

- 5 bands, 52-216μm
- 40x64 pixel arrays
- FOV: 5 to 60 arcmin²
- Beam size 5" at 53μm
- Galactic center is a prime target for HAWC+