

# Bolometer Mission Study Activities

## Low resolution mission option

- band optimization for foregrounds (Dickenson, Cooray)
  - what is optimal band weighting?
  - how low to extend frequency coverage?
- aperture/resolution optimization
- improved systematics analysis (Keating, GSFC workshop)
  - waveplate beam mitigations
  - scan angle uniformity (Gorski)
  - time domain effects
  - other ideas (dipole calibration, scan jackknives)
- cost justification by analogy, grass roots

## High resolution mission option

- mass assessment for gregorian-dragone
- alternative optics (e.g. crossed Dragone) and packaging (Lee)
- scan pattern vs. sunshield diameter
- cryostat vs. cryo-cooler trade study
- team-X study after instrument requirements and design are fixed
  - definition of S/C subsystems, vehicle, etc
  - cost assessment

Team: mechanical designer, mission specialist, cryogenic expert, sun shield expert, on-call specialists, team-x