

Workshop Themes

Science Case

Disk Masses

ISM/disk diagnostics

Disk/Solar System Ices + solids

Star Formation/ISM

Galaxies/Star Formation B-field

Stars/Novae/Supernovae

Galaxies ISM

Galactic Center

Solar System/Comets gas

Capability

HD line

High-res MIR/FIR spectroscopy

Med-res MIR spectroscopy

High-res FIR spectral imaging

MIR and FIR polarimetry

Monitoring/Photometry/Imaging

Med-res spectroscopy

Imaging, spectroscopy, polarimetry

Med-res and High-res spectroscopy,
imaging

Some Gaps

- High-resolution mid-IR spectroscopy/imaging
- Mapping speed for existing instruments
- Wavelength coverage for existing instruments
- Sensitivity for some key wavelengths
- Line Polarimetry

Synergies

- SOFIA's access to the mid-IR and far-IR sky can support science at other wavelengths
- JWST/ALMA at neighboring wavelengths
- Other observatories with large FOV and mapping capability:
 - Green Bank (Joint Call Cycle 9)
 - SMA
 - JCMT
 - ALMA 7m
 - APEX

Where do we go from here?

SMO will evaluate the contributions and feedback from this workshop to assess the best science SOFIA can do.

SMO will identify gaps in instrumental capabilities

We will hold another virtual workshop to discuss instrument concepts and relevant technology

Based on community input and external Red Team review, SMO will develop an instrument roadmap document and submit to NASA.

We want your help...please provide us advice and give us your feedback! Googledoc, SOFIA website, jjackson@sofia.usra.edu

SOFIA Instrument Roadmap Workshop 2

B-G Andersson

June 24, 2020



Instrument Roadmap – Workshop 2

- July 27 – 29
- WebEx virtual meeting
- Subject: Technology and Instrument Concepts
- Invited and Contributed talks
- Invited speakers include:
 - P. Goldsmith, U. Graf, P. Knezek, L. Looney, C. Packham, M. Person, J. Pipher, E. Smith, C. Walker (more to come)
- **Contributed talks are invited:**
 - SOFIA instrument concepts, technology development, software
 - Web site forthcoming. In the mean time please contact B-G Andersson (bg@sofia.usra.edu) for inquires