

From the Rise of Metals to Water for Habitable Worlds

National Aeronautics and Space Administration





Origins Space Telescope: Community Participation

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How the community is currently helping

Creating the science case! Members of the Scinece and Technonolgy Definiton Team (STDT) are chairing Science Working Groups responsible for building the science case for the Origins Space Telescope (OST)
Members of the community provided two page overviews of science cases that they wish to pursue with OST to set the priorities for the telescope design

Continuing to evolve the Science Case

- For the concept study to be successful, OST needs to have and support a broad, engaging science case that addresses fundamental research topics of the astronomical community and highlighted as relevant by the NASA roadmap
 Please join one of our five Science Working Groups (STDT leads listed) to participate in evolving the science case:
- The current Science Case has been used to start the design process for a telescope that can support the main science drivers



Planet Formation and Exoplanets: Klaus Pontoppidan and Kate Su Galaxy Evolution over Cosmic Time: Lee Armus and Alex Pope Milky Way, ISM and Nearby Galaxies: Karin Sandstrom and Cara Battersby Early Universe and Cosmology: Matt Bradford and Joaquin Vieira Solar System: Stefanie Milam



Enabling technologies

- Currently five instruments (imagers, spectrometers, polarimeters) for a large, actively cooled, segmented aperture are being studied see
- The Origins Space Telescope is intended to be a general astronomical observatory able to address our science questions of the 2030s (four core questions are described in poster 238.18). As such OST will support a community much broader than the core infrared community of previous telescopes with higher level data products that are accessible to the general community. Astronomers do not have to be experts in far-infrared observing to get involved!

poster 238.20

 Instrument builders and technologists are welcome to share their expertise with our Mission Concepts Working Group chaired by Tom Roellig



- STDT members are present at AAS meetings to share progress and answer questions
- More information and resources for presentations will be available on the OST website

Community Participation is critical to a successful design study for the Origins Space Telescope! Contact any member of the STDT (look for the red OST stickers) or see our website for more information

We need you!

The **Origins Space Telescope** is the mission concept for the **Far Infrared Surveyor**, a study in development by NASA in preparation for the 2020 Astronomy and Astrophysics Decadal Survey.

Twitter: @NASAOriginsTele http://origins.ipac.caltech.edu/ Secret OST Word: Community