

HST-TESS Advisory Committee

Context

NASA's Transiting Exoplanet Survey Satellite (TESS) started science operations in July 2018 and is now well into its 2-year prime mission. TESS observations have already led to the discovery of a wide range of planetary systems, including hot Jupiters, super-Earths, sub-Neptunes and potential terrestrial analogues. Those planets will be prime targets for observation with the James Webb Space Telescope. HST will play a crucial role in refining the JWST target list by providing initial characterization of selected exoplanets; those observations will require significant investment of resources, time and effort, and require an appropriate level of planning.

After consultation with the Space Telescope Users Committee, the Space Telescope Science Institute's Director, Ken Sembach, has decided to constitute an Advisory Committee to provide counsel on how HST can best support TESS follow-up for JWST. Committee members will be drawn from the science community.

Charter

The HST-TESS Advisory Committee is charged with providing guidance on optimal strategies for maximizing the scientific return from HST observations of TESS targets. In particular, the Advisory Committee should address the following tasks:

- Solicit input from the community on how HST can capitalize on the discoveries made by TESS;
- Identify specific science themes and/or exoplanet types that should receive particular attention;
- Provide advice on the optimal timing for substantive follow-up observations and suggest mechanisms for enabling those observations;
- Comment on the appropriate scale of resources likely required to support those programs.

The committee will summarize their conclusions in a report to the Director and presentations to the STUC by the fall of 2019.

Constituted

April 2019

Status & updates

May 15 2019: The committee has issued a **Call for White Papers** - details are given [here](#).

Five white papers were received, summarised [here](#)

November 7 2019: The final report was submitted to the STScI Director and is linked [here](#)

Membership

Chair: Daniel Apai (University of Arizona)

Members: Nicolas Cowan (McGill University), Kevin Heng (Center for Space and Habitability, Bern), Laura Kreidberg (Harvard), Mercedes Lopez-Morales (Center for Astrophysics), Caroline Morley (University of Texas, Austin)

STScI contacts: Neill Reid, John Mackenty