The field of exoplanets has grown considerably over recent years, with more than 4000 exoplanets detected to date. In consonance, the characterization of exoplanets has become an increasingly important aspect of the field, to understand the diversity of these objects and answer fundamental astrophysical questions about their composition, structure, formation, and evolution. Beyond isolated detection methods, we are now facing a new paradigm in exoplanet science where we must consolidate resources and combine observational methods to probe different physical characteristics and understand the true nature of these planets.

The Space Telescope Science Institute is excited to host the 2021 STScI Spring Symposium, “Towards the Comprehensive Characterization of Exoplanets: Science at the Interface of Multiple Measurement Techniques,” which will be a fully virtual event. The symposium will bring the community together to enable collaborations between diverse exoplanet sub-fields, in observation, theory, and instrumentation. We will share our current capabilities in combining different detection and characterization techniques and address the needs and wants of the exoplanet community as we work towards closing the gaps towards a more complete understanding of exoplanets.

This symposium will address scientific questions like:

- How do we combine techniques to have a more complete census of exoplanets?
- Which sets of observed quantities best enable holistic planetary characterization?
- How do observed architectures of exoplanet systems compare to the Solar System?
- How atmospheric chemistry of exoplanets correlates with the physical properties and compositions of their host stars?
- How do planets form and evolve?
- What are the emerging areas in exoplanet science?

The symposium will feature presentations on recent advances in the field, as well as discussions on the future directions of exoplanet research. Confirmed speakers include experts in the field, and the agenda will include workshops and panel discussions to foster collaboration and knowledge exchange.

2021 Scientific Organizing Committee

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