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Hubble Space Telescope Ultraviolet Legacy Working Group

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Charter for the formation and objectives of an HST Ultraviolet Legacy Science Definition Working Group

After consultation with the Space Telescope Users Committee and the science community, the Space Telescope Science Institute's Director, Kenneth Sembach, has decided to devote a substantial amount of Director's Discretionary time in observing Cycles 27-28 to a new Hubble Ultraviolet Legacy Initiative centered on star formation. The primary goal of this initiative is to extend knowledge of the universe through the unique ultraviolet observing capabilities available only with HST. The overall program will serve as the foundation for a legacy dataset on which the astronomical community can build and contribute observational, theoretical, and numerical simulation data and models.

The charge to the Working Group is to identify the most effective strategy for achieving high scientific impact and return for an investment of 600-1000 orbits of ultraviolet observations related to star formation and the associated stellar physics. A program (or set of programs) on this scale presents scientific opportunities that are not ordinarily available through the normal time allocation process. An important component will be the identification of ancillary data and information that can be incorporated in a manner that provides broader access and greater depth to the scientific initiatives identified for this legacy program.

The HST Ultraviolet Legacy Working Group is hereby formed with the following primary tasks:

- Define the overarching science case and a set of science goals for a comprehensive set of ultraviolet observations related to star formation and associated stellar physics that advance scientific discovery and provide lasting archival value.
- Solicit input from the astronomical community in defining the science goals.
- Recommend representative suites of observations necessary to accomplish the science goals of this initiative. Prioritize if possible.
- Identify opportunities for coordinated observations over the full wavelength regime with other ground-based and space-based observatories.
- Produce a short (10-15 page) white paper describing the results of the above tasks by January 20, 2019.

The Working Group should take into account both the archival research value of the planned observations and the coordination of these observations with other observatories. The Working Group should also assess how the proposed science program might establish foundational science for the next generation UV/OIR Great Observatory.

The Working Group will consist of approximately 8-10 members of the astronomical community selected by STScI and the Working Group Chair, Prof. Sally Oey (University of Michigan). The Chair of the Working Group will organize the meetings of the Working Group, and STScI will provide logistical (travel, meeting, telecon, etc.) support as needed. We expect that the Working Group will have at least one face-to-face meeting, supplemented by regular telecons and email exchanges.

The Ultraviolet Legacy Initiative follows in the footsteps of the Hubble Frontier Fields Initiative, and will be modeled after the Frontier Fields program. All data obtained will be non-proprietary, as will contributed data and information, which in return will be recognized with appropriate citation and attribution. STScI will identify an in-house team to implement the program and produce high-level data products for dissemination to the community. Opportunities to supplement these core observations and perform archival research will be available through the standard HST Calls for Proposals.

The primary STScI contacts for the Working Group will be Tom Brown (STScI HST Mission Office Head) and Neill Reid (STScI Associate Director for Science). Both will be ex-officio members of the Working Group.

Membership:

Chair: Sally Oey (Michigan)

Members: Nate Bastian (Liverpool), Paul Crowther (Sheffield), Andrew Fox (STScI), Jay Gallagher (Wisconsin), Ana Gomez de Castro (Madrid), Claus Leitherer (STScI), Christy Tremonti (Wisconsin)