

## **Webb @ STScI**

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### **Abstract**

In the lead up to *Webb*'s launch in Spring 2019, the Institute continues its work as the science and operations center for the mission. The Institute has played a critical role in a number of recent *Webb* mission milestones. *Webb* cycle 1 science is beginning to come into focus with specifications for Guaranteed Time Observers, Early Release Science, and General Observer programs to be finalized in the coming year.

### **Webb Science and Operations Center**

With the launch of *Webb* on the horizon, the Institute continues preparations as the mission's Science and Operation Center (S&OC). NASA recently made a decision to move the launch date of *Webb* to Spring of 2019, a change of approximately six months from the previous launch date in October 2018, to facilitate spacecraft integration [1]. The Institute will play a major role in ensuring the science return from the *Webb* mission, with lead roles in proposal planning, flight operations, data management, and science community and public outreach. The past year has seen the completion of a number of major milestones for the *Webb* S&OC. Construction has been completed on the Mission Operation Center (MOC, Figure 1) located at the Institute's main building in Baltimore, MD. The MOC will serve as the heart of flight and science operations for *Webb*. The Institute has completed delivery of the first and second releases of the S&OC that fully integrates the software subsystem functionality needed to support *Webb*'s science mission.



**Figure 1:** *Webb* Mission Operations Center. The Institute is the Science and Operations center for the *Webb* mission. Image credit: STScI.

The first science proposals to use *Webb* have also been received over the past year. The *Call for Proposals* from Guaranteed Time Observers (GTO) was issued in January and programs requesting ~3800 hours of observations were received on April 1<sup>st</sup>. Those proposals were reviewed by NASA and the Director of the Institute, and detailed observation lists have been published for the astronomical community[2]. Also in January, The Institute announced the first worldwide opportunity to propose for *Webb* observations with the release of the *Call for Notices of Intent for the Director's Discretionary Early Release Science* (DD ERS) program. The DD ERS programs will utilize ~500 hours of Director's Discretionary time. They are designed to inform the community about *Webb's* capabilities by providing rapid access to scientifically interesting, representative datasets early in Cycle 1 with no exclusive access period. A total of 200 DD ERS notices of intent to propose were received by the March 3 deadline involving the participation of 2,379 scientists, including 477 who had never proposed for *Hubble* time. The DD ERS *Call for Proposals* was released on May 19<sup>th</sup> and we received 106 proposals involving 2,957 investigators and collaborators from 38 countries and 44 U.S. states and territories. The proposals are currently under review by the DD ERS Telescope Allocation Committee, which meets at the Institute in early October. The DD ERS results will be made public by November 1.

Beyond the *Webb* GTO and DD ERS program, the Institute is busy gearing the community up for the planned release of General Observer (GO) *Call for Proposals* on November 30<sup>th</sup>, 2017 [2]. Up to 6,000 hours will be available for observations by the worldwide community. The GO proposal deadline is currently slated for March 2<sup>nd</sup>, 2018 [3]. Over the past year the Institute has supported more than a dozen proposal planning workshops in Baltimore and elsewhere to familiarize potential *Webb* users with observatory capabilities and proposal planning tools. *Webb* user tools include modernized documentation, exposure time calculator, and helpdesk interface that will facilitate groundbreaking *Webb* science in cycle 1 and beyond. Our public outreach team is also gearing up for *Webb* cycle 1 science results that will certainly capture the public's imagination by expanding their set of public engagement tools to include virtual reality and new digital media in addition to the traditional forms of news, exhibits, and video. The Institute's *Webb*-focused websites for observers ([jwst.stsci.edu](http://jwst.stsci.edu)) and the public ([webbtelescope.org](http://webbtelescope.org)) provide key information for *Webb's* science mission.

## References

- [1] Dunbar 2017, "[NASA's James Webb Space Telescope to be Launched Spring 2019](#)" (accessed 02.10.17)
- [2] JWST User Documentation/STScI 2017, "[JWST GTO Observation Specifications](#)"
- [3] JWST Policy Team 2017, "[JWST Cycle 1 Proposal Opportunities](#)" (accessed 02.10.2017)