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Title: "The Integration and Test Program of the James Webb Space Telescope"

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Abstract:

The James Webb Space Telescope (JWST) project has entered into a comprehensive integration and test (I&T) program that over the coming years will assemble the various elements of the observatory (the Optical Telescope Element [OTE], the Integrated Science Instrument Module [ISIM], and the Spacecraft) and verify the readiness of the integrated system for launch. The I&T program as replanned for a 2018 launch readiness date has a number of interesting features. These include a streamlined ISIM cryo-vacuum test program at Goddard Space Flight Center, a streamlined OTIS (OTE + ISIM) test program at Johnson Space Center (JSC), the addition of a second Core cryo-vacuum thermal test, the enhancement of the Pathfinder program at JSC, and enhancement of the subsystem-level testing program for the MIRI cryo-cooler. These latter activities all serve to reduce the risk heading into the end-to-end optical and thermal testing of the telescope at JSC, leading to reduced cost and schedule risk for that critical activity. We report here on the overall I&T program for JWST and on the status of the hardware and plans that support it.