Roman Project News

Dec 2020
Some project news items

• Continuing towards Mission Critical Design Review
  – Key CDR dates:
    • Mission CDR September 2021,
    • Ground system CDR July 2021,
    • Coronograph Instrument CDR April 2021,
    • Wide Field Instrument CDR Jan 2021,
    • Optical Telescope Assembly CDR Dec 9-10 2021
Wide Field Instrument Status

- The Detector Characterization Lab is busy! 15 detectors have passed quality/performance testing (need 18 flight + 6 spare)

- Change in I&T plans allowed us to swap out an engineering filter for a science filter
  - The FSWG filter working group had previously provided a recommendation for what to do if an additional filter slot became available
  - Added a Kshort filter (1.95 – 2.3 micron bandpass)
  - The nominal point-source 5-sigma limiting magnitude is 26.16 in a 1-hour exposure, with zodiacal light set at twice minimum.

https://roman.gsfc.nasa.gov/science/Roman_ReferenceInformation.html
Coronograph Instrument Status

• Deformable mirror passed TRL 6 demonstration review on Nov 10 (i.e. passed environmental testing)
Telescope Status

• Primary, secondary and tertiary mirrors have completed polishing and coating.
• Ongoing work on testing, assembly and construction of the optical systems.
Science Investigation team working groups

- **Calibration Working group**
  - Continuing to discuss WFI TVAC tests (in the context of a request from the project to scrub the WFI TVAC test plan for schedule margin)

- **Data/Software working group**
  - Discussing catalog details

- **WSM (spectroscopy)**
  - Discussed plans/content for upcoming meetings, will discuss HLPP with a focus on needs/capabilities for spectroscopy at an upcoming meeting

- **CGI Dark hole algorithms group up and running**

- **Detectors working group**
  - Started discussion on placement of SCAs in the WFI focal plane
AAS meeting plans

• Splinter sessions on Time Domain Astrophysics, Milkyway Galaxy
• Roman Town hall
• Roman content at NASA, STScI and IPAC booth
  – including webinars on “Wide Field Survey Science with the Nancy Grace Roman Space Telescope” by Dominic Benford, and “Exoplanet Science with the Nancy Grace Roman Space Telescope” by Aki Roberge.
Press activities

• November: Feature “NASA’s Roman Space Telescope to Uncover Echoes of the Universe’s Creation” on nasa.gov
  – With accompanying social media post and video
• October: Science writers workshop hosted by STScI
• Exoplanet program office released 3 new “Galaxy of Horrors” posters (dead galaxy, dark matter, GRB)