THE NANCY GRACE ROMAN SPACE TELESCOPE
Roman Project Status (selected highlights)

• Wide Field Instrument
  – Completed opto-mechanical assembly, including filter wheel installation and dry fit of engineering unit focal plane system
  – Flight focal plane array in thermal vacuum test.
  – Flight relative calibration system complete, and starting system level test

• Coronagraph Instrument

• Telescope
  – The Primary Mirror Assembly (PMA) and Forward Structural Assembly (FSA) (with the Secondary Mirror Assembly) are complete.

• Spacecraft
  – Completed assembly of the spacecraft bus Primary Structure
  – The Antenna Pointing System (APS) team completed acceptance testing of Flight Model 1 and 2 Gimbal Actuators.
  – The Low Gain Antenna (LGA) Vibration Testing is complete.

• Remain on track for October 2026 launch readiness date
AAS Meeting – Jan 9-12

• Plans for winter AAS meeting
  – Roman Space Telescope Town Hall
    • Tuesday 6:30pm, rm 618/619
  – Splinter session: Kickoff information session for core community survey definition
    • Community led Definition of Roman Core Community Survey
      – Wednesday 1pm, rm 4C-3
      – Will be followed later in January by a virtual information session for people who cannot attend the AAS one
  – Splinter session: Nearby Galaxies Under a New Light with Roman –
    • Monday 1pm, rm 304
Triplet Test Data Now Available at MAST

- At the heart of WFI is an array of 18 sensor chip assemblies (SCAs) in a focal plane. Each SCA in the focal plane mosaic consists of a 4096x4096 pixel Teledyne H4RG-10 sensor.
- Each SCA has undergone extensive testing by the NASA GSFC Detector Characterization Laboratory (DCL).
- To support the science community in preparing for Roman data, the Roman Project has released triplet test data for SCA 21816.
- In a triplet test SCAs are connected to flight-like sensor control electronics using flight-like electrical cables (a triplet is sensor+electronics+cable).

Triplet Test
Data Now Available at MAST

• This release include release notes, a Getting Started Jupyter Notebook, and over 200 GB of data.
• These data products enable the measurement of:
  – Detector Linearity
  – Detector Read Noise
  – Detector Gain
  – Detector Dark Current
  – Flat Field Uniformity in each of the filters

An example of an image used to measure flat field uniformity.

Keeping in touch with Roman

• Join the Roman news mailing list
  – sign up to the mailing list by sending an e-mail to Roman-news-join@lists.nasa.gov (no subject or text in the body is required)

• Monthly Roman Community Forum
  – Will be replaced by community survey definition information session
  – https://asd.gsfc.nasa.gov/roman_forum/

• Monthly Roman Virtual Lecture Series
  – https://roman.ipac.caltech.edu/Lectures.html

• Regular Science Workshops
  – Next one will be organized by STScI – Roman Science Inspired by Emerging JWST Results, June 20-23
Roman Science Interest Group (2020 - .. )


- Meeting presentations and notes available on the meetings tab
  - Discussions on observing program, proposal opportunities, mission/instrument status etc
  - Provides advice and guidance on all aspects of community engagement

- Regular opportunities to join this group
  - New call coming soon!

- Reports to Project and Program Scientists

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<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tr>
<td>Megan Donohue (Chair)</td>
<td>Michigan State U.</td>
</tr>
<tr>
<td>Zeljko Ivesic</td>
<td>U. Washington</td>
</tr>
<tr>
<td>Jessica Lu</td>
<td>UC Berkeley</td>
</tr>
<tr>
<td>John MacKenty</td>
<td>STScI</td>
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<tr>
<td>Ashley Villar</td>
<td>Columbia U / Flatiron Institute</td>
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<tr>
<td>Alice Shapley</td>
<td>UCLA</td>
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<tr>
<td>Keith Bechtol</td>
<td>UW, Madison</td>
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<tr>
<td>Saurabh Jha</td>
<td>Rutgers U</td>
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<tr>
<td>Peter Melchior</td>
<td>Princeton U</td>
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<tr>
<td>Dara Norman</td>
<td>NOIRlab</td>
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<tr>
<td>Jessie Christiansen</td>
<td>NEXSci/ CalTech</td>
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<tr>
<td>Rachel Bean</td>
<td>Cornell U</td>
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<td>Ryan Hickox</td>
<td>Dartmouth</td>
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<td>Dimitri Mawet</td>
<td>CalTech</td>
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<tr>
<td>David Spergel</td>
<td>Simons Foundation (ex-officio)</td>
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<tr>
<td>Jeremy Kasdin</td>
<td>U. San Francisco (ex-officio)</td>
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<tr>
<td>Roeland van der Marel</td>
<td>Science Center (STScI) (ex-officio)</td>
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<td>Lee Armus</td>
<td>Science Center (IPAC) (ex-officio)</td>
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Three Paths for Community Engagement

• **Join Roman Technical Working Groups**
  – Groups pursing topics of interest across many science areas
  – Two groups currently (calibration, software) but will add more after ROSES proposal selection
  – Simple web sign up page, open to all

• **Submit science pitch/white paper for Core Community Survey definition**
  – Science pitch – few paragraphs describing science case for one of the community surveys, short questionnaire on needed survey parameters
    • Deadline Feb, low bar to entry (i.e. encourage high participation)
  – White papers – several page document with details on science case, sketch of survey design and methods/metrics on how to evaluate science FOM against survey parameters
    • Deadline summer, detail enables more meaningful evaluation

• **Submit proposal to Roman ROSES solicitation**
  – Funding to work on Roman science preparation (including engagement in working groups and survey definition)