Roman ROSES: Three Opportunities

• **Wide Field Instrument Science**
  – This opportunity provides support to prepare for and enhance the science return of *Roman* that can be addressed with its Wide Field Instrument (WFI).
    • Multiple calls between now and launch
    • Regular (2-year) and Large (4-year) categories

• **WFI Project Infrastructure Teams**
  – This opportunity provides sustained funding for teams to develop infrastructure needed to enable the community to pursue *Roman*'s ambitious science goals in cosmology and exoplanet demographics that are part of Roman's mission success criteria.
    • Additional science areas that require extensive and sustained infrastructure development will also be considered.

• **Coronagraph Community Participation Program (CPP)**
  – This provides an opportunity for proposers to work with the coronagraph instrument team to plan and execute its technology demonstration observations.
    • Multiple calls between now and launch
What’s different from the SITS?

- Larger number of small teams/individuals, many on short term (2-year) awards
  - Greater turnover, more flexibility to adjust science team to evolving science landscape and project needs
  - Multiple opportunities for new people to join

- WFI Project Infrastructure teams have long term baseline (continue through to end of prime phase)
  - Provide continuity

- Strong emphasis on science community coordination that is independent of the individual science teams
  - Community Science Consortia
  - Reset structure of joint working groups (keeping the ones that work well)

- Undergrad supplement for WFS

- ROSES solicitation in ~2 years
  - Additional CPP and WFS opportunities

- CGI SIT replaced by CPP
  - Group of ~6 individuals/small teams who work together

- FSWG replaced by ISWG
  - PIT PIs, selected WFS reps, ex-officio and additional appointed members as needed
Wide Field Science Proposals

• **Preparing for and enhancing Roman WFI Science**
  – Can include, but are not limited to, any combination of the following topics:
    • Precursor observations using ground- and/or space-based observatories to prepare for future Roman science observations and/or to provide calibration capability;
    • Development of Roman analysis software beyond that provided by the Science Centers. This could include topics like machine learning techniques in time domain astrophysics, high precision astrometric measurement techniques, etc.;
    • Development of algorithms for joint processing with data from other space- or ground-based observatories such as deblending algorithms, photometric redshift training and calibration, or forced photometry;
    • Theoretical and/or phenomenological modeling directly related to Roman capabilities;
    • Instrument calibration and characterization;
    • Development of survey strategies;
    • Development of simulation tools, producing simulated datasets, and conducting or participating in data challenges.

• **Supporting the Roman project and Science Centers**
  – WFS supported teams are expected to form part of the funded Roman science community providing support and guidance to the Roman project and science centers.