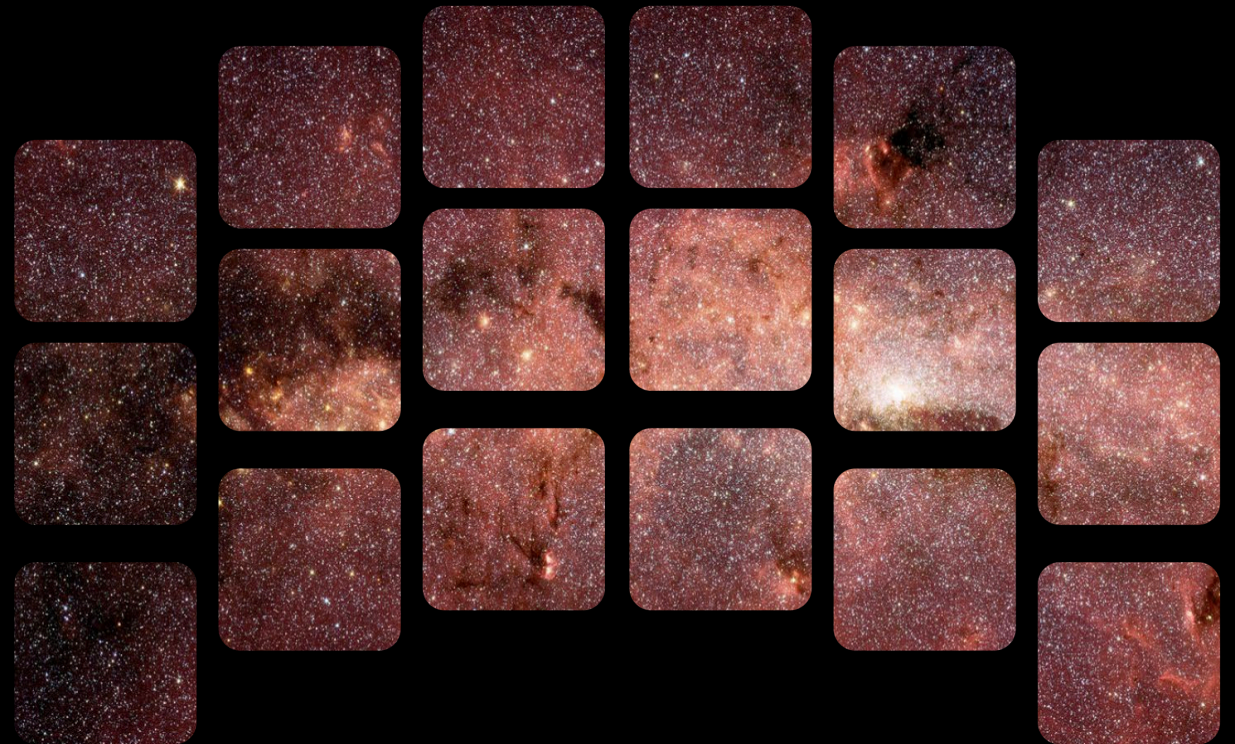


R.ÖMAN

Community Process for Survey Definition



SPACE TELESCOPE

Core Community Survey Definition

- **Goals:**

- Provide observations needed to enable mission science objectives in cosmology and exoplanet demographics
- Maximize science return
- Ensure breadth of science and community across all surveys
- Maximize community engagement and input in definition of surveys
- Establish a transparent process
- Ensure final survey definition recommendations made by a body and process the community perceives as representative and balanced

We are developing the community process with our science centers (who lead the implementation) and will review plans with our advisory committees. What's presented here is not a final plan for review, but an outline of the kind of things we have in mind to guide discussion.

Community Engagement

- **Workshops to inform community about Roman capabilities**
 - Outline available parameter space for each survey
 - Constraints are that each survey provides data needed to meet the science requirements, and at least 25% time (TBC) is retained for General Astrophysics Surveys
- **White paper call for papers detailing science that can be done with the survey**
 - Encourage development of metrics/figures of merit, and description of specific observational needs
- **Additional workshops to enable community cooperation and consensus**
 - Provides a forum for iterative development of survey concepts

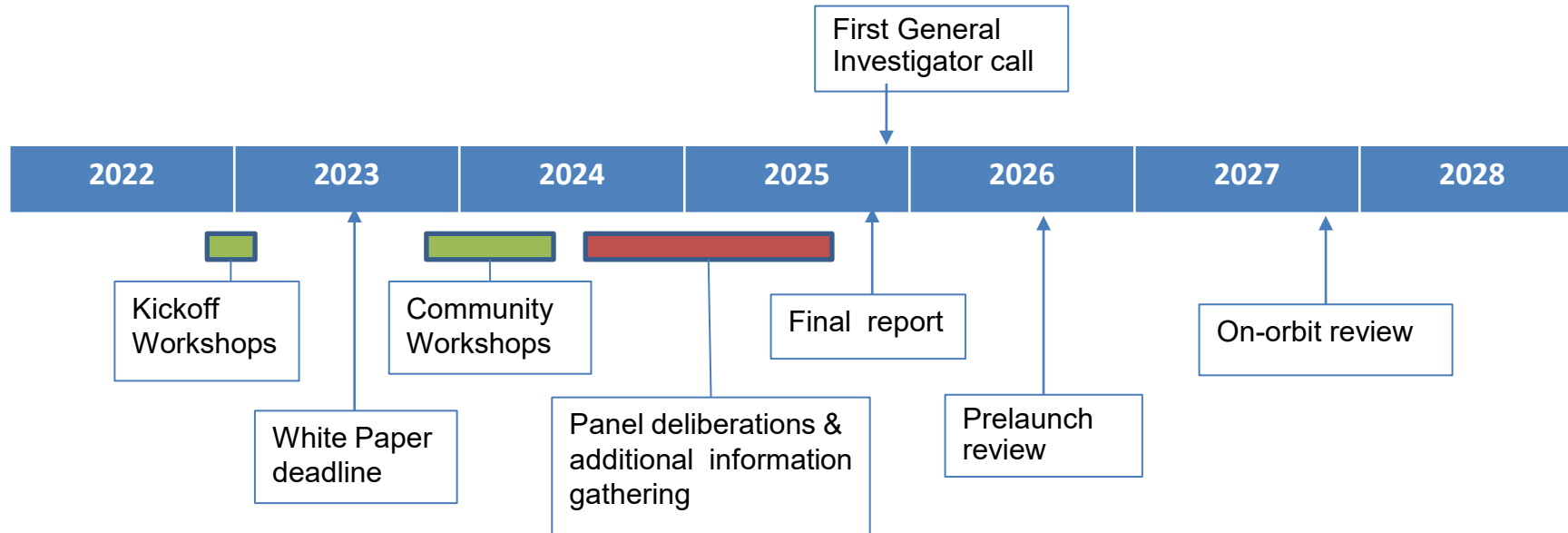
An Inclusive process

- **Make sure that the entire community has a voice in the survey definition process**
- **Reach out as broadly as possible**
 - Leverage mailing lists at both Roman science centers (STScI and IPAC) in addition to existing Roman mailing lists and other astrophysics lists (e.g. Chandra)
 - AAS, APS etc (town halls, special sessions, announcements in newsletters)
- **Enable and encourage participation from early career scientists**
 - Provide travel support for workshops
- **Proactively reach out to researchers at undergraduate serving institutions and minority serving institutions**
 - Formed a small focus group to get input on how Roman can best engage and support that part of our community

Evaluation and recommendations

- **Set up and charter a committee structure to do the work of recommending survey definitions based on community input**
 - Individual survey committees (one for each of the core community surveys)
 - Solicit and incorporate additional community input via a variety of mechanisms (workshops, focused white paper calls, Town Halls, etc.)
 - Evaluate survey options against science metrics/figures of merit
 - Produce recommendations for survey definition with options for extensions/enhancements
 - Needs to be specific enough that it is clear how to implement
 - Top level Steering committee (comprising reps from the individual survey committees + advocates for general astrophysics surveys)
 - Provides recommendations on balance between the various core community surveys and the general astrophysics survey program

Notional Timeline



Questions for the Committee

- **Is a community process an appropriate way to define the Core Community Surveys?**
- **If yes, is our general approach on running the community process reasonable?**

Backup

Community input on pre-selection of an Astrophysics Survey

- **Option to pre-select one survey of up to one month of observations notionally to be executed within the first two years of the mission**
 - Provides opportunity for observations that would substantially benefit from multi-year preparatory activities (precursor observations, simulations etc.)
 - Allows for a substantive survey, but does not commit to a large amount of early observation time
 - Leaves most of the General Astrophysics Survey time to be assigned closer to launch (and after the Core Community Surveys are defined)
 - Science topic/justification is open

Community input on pre-selection of an Astrophysics Survey

- **Two Step Process**

- **1) Lightweight white paper request for information (released 2021 Aug 27, deadline Oct 22)**

- Short (~2 pages) focusing on science case, science benefit from pre-definition and brief outline of strawman concept / or describe why we should NOT proceed
 - 20 white papers received on a broad range of topics
 - Evaluation committee (Spring 2022)
 - Determine whether to proceed with pre-selection of a survey
 - Which scientific area(s)/survey concept(s) to focus on

- **2) Community process to define/optimize the survey (2022)**

- Opportunity for additional people/groups to provide input on implementation of the survey concept
 - Community owned (no PI)
 - Support for preparatory activities available via multiple ROSES calls between now and launch