

Gravitational Waves Architecting Study Workshop

Study Overview

Ken Anderson (Study Manager)

Logistics

- **Very tight agenda for the next two days**
 - Requires strict adherence to time limits by all parties
- **Update to agenda: CST caucus Wednesday starting at 1:00; open discussion will follow**
- **Dinner reservations for tonight at G & M restaurant**
 - 804 Hammonds Ferry Road, Linthicum Heights
 - Maps and sign up sheet at the registration table
 - Strongly encourage carpooling as parking is limited and towing is enforced
- **If you did not pre-purchase lunch tickets, you can still purchase a ticket from the cafeteria**
 - Do so during the break to save time during lunch
 - Lunch lines can be long

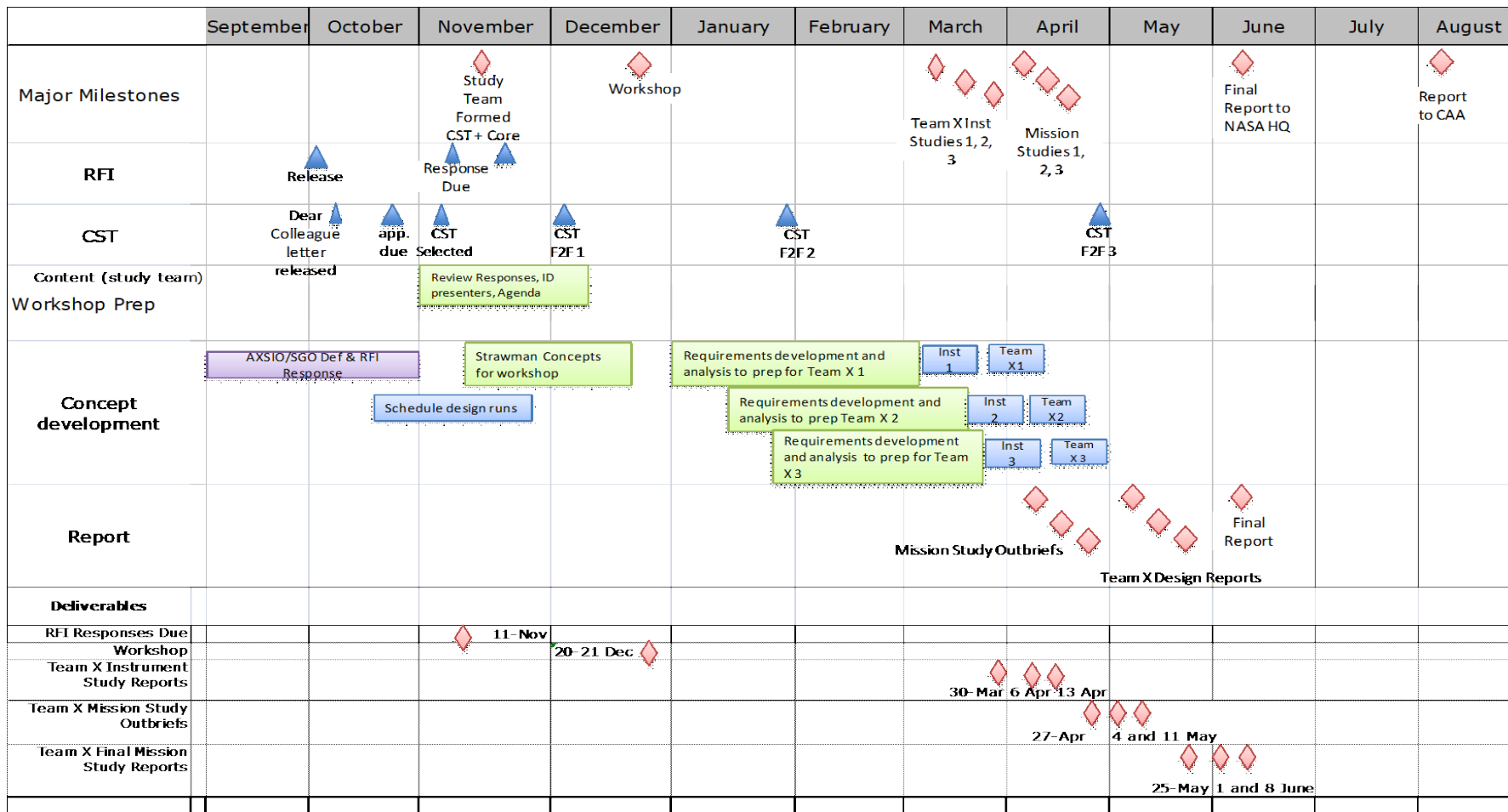
Study Objectives

- **Objectives (as stated by PCOS office)**
 - Determine the range of science objectives of LISA that can be achieved at a variety of lower cost points
 - Explore mission architectures and technical solutions that are fundamentally different from the heritage designs
 - Fully engage the community and ensure that all voices are heard, all perspectives considered
 - Create data for a report to the CAA that describes options for science return at multiple cost points for Gravitational Wave astronomy
- **Deliver final report to NASA HQ that**
 - Describes and analyzes trade space of science return vs. mission cost
 - Summarizes the mission concepts developed during the study and how they relate to the trade space and other mission concepts that were not developed in a design lab
 - Summarizes the RFI responses and the workshop and describes how they were folded into the whole study

Workshop Objectives

- Provide the science community an opportunity to comment on and shape the missions that will be developed in design labs, and provide a forum for discussion and exchanging information between the CST, study team and the community
- The basis for discussion and selection of concepts for further study is the degree of compliance with LISA objectives, as endorsed by NWNH
- We are **NOT** revisiting decadal survey decisions regarding science questions or mission priorities
- The workshop is **NOT** selecting candidate missions
 - Selection by the workshop does not indicate the mission will happen, nor does non-selection imply the mission will not happen
 - We are studying *representative* missions for the various cost classes. The goal is to assess the fraction of LISA science that can be performed vs. mission cost. There are no winning or losing concepts.
- Goal is to select missions that cover as much of trade space (cost, science return, technology, measurement approach, etc.) as possible
- Selected missions will then be further defined by the Team X organization at JPL
- No recommendation for a specific mission or a preferred cost class will be given in the final report

Schedule



Note: schedule for a single study; PO will be running two simultaneously