Workshop Deliverables

Candidate Structure of the Report

Science goals that drive the design

How did the Universe begin?

Inflation

How does the Universe work?

Light relics, neutrino mass (from lensing; what about from clusters? requires redshift surveys), [dark matter?, dark energy?]

How did the Universe evolve?

The epoch of reionization, Galactic structure formation

Science goals that do not drive the design

neutrino mass + dark energy (from cluster counts, requires z's), point sources (requires z's), dust physics

Science

- What classes of models is it compelling to rule out in addition to and at levels of r below the Starobinsky-type class of models?
- Which science goals have we not included yet? What other science targets that are well suited for space have we not thought about?
- Is there a science argument for a Guest Observer program?
- How are the various science goals affected by foregrounds?

Foregrounds

Q. How far do we want and is it realistic, to push Foreground Separation exercise. What are the expected deliverables?

A. For a range of sky models, show current level of separation (is \sigma(r) the best metric?) Highlight approximations, point to potential improvements and challenges.

Systematics

How far do we want, and is it realistic, to push systematic control? Need to have a plan for each of the systematic effects we are analyzing as to how it moves forward, and what is the end goal.

The talks need to explain where we are with each of the effects, what has been done, and what is the plan ahead.

Each of the analyses will include simplifications. Need to be clear about the simplifications, highlight what additional complexity is still feasible, and what we learn with what we have so far.

The effect of 1/f and correlated noise - what do we know from Planck/CORE? do we need end-to-end simulations?

Technology

Which technologies need to mature? Which are mature now? Which are likely to be mature by 10/2023 with little additional investment? (mature = TRL5)

For the technologies that need to mature, what is the technology maturation plan?

General Discussion

The pitch for space: now or wait or ignore the question?

Complementarity with S4

The need for a balloon program

Papers

- Which papers are we envisioning? Which topics are ripe for white and for refereed publications?
 - Refereed: Foregrounds? Comprehensive science compilation (e.g. CORE but much deeper)?
 - White: Complementarity with ground? Legacy Science? More details of implementation?

STM Work

- Meet with Galactic Science and others for STM

Report

- Assign writing responsibilities for the report; outline schedule