Wednesday, April 25, 2018

Workshop Deliverables

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?
- Ancillary science: are we properly reaching out to other communities?
- 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

What is the pitch for space?

Is there an agreement on the characteristics of what a space mission should include.

Should we advocate for a space mission now or wait for hints from the ground or not address the issue?

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?

Report

- Are there pieces missing? Does the overall structure make sense? Do we have the section responsibilities sorted out? Is the schedule clear?

STM Work

- Meet with Galactic Science and others for STM