

“CMB Cross-correlation WG”

Update on the Interfaces with CMB Collaborations (SO)

C. Baccigalupi, G. Fabbian & N. Aghanim

Context & situation

- Invitation of D. Spergel to a colloquium in SISSA (initially May 2020)
 - Discussion on how to initiate scientific collaboration, identify common projects and set-up path for an MoU
 - → Organisation of a first F2F meeting (initially May 2020)
 - Colloquium and meeting cancelled → Explore some possible activities
 - See following slides

 - In parallel, SO collaboration invited members of large collaborations (LSST, Euclid, SKA, ...) 2 days meeting on “expectations from SO” in June/July TBC
- Ongoing planning for CMBX implies intensification of related activities

First Euclid CMBXC/SO workshop

SISSA, Fall 2020, TBD

Proposed structure and purpose

General purpose

- Introduce Euclid CMBXC and SO groups
- Discuss items of common interests
- Compare methodologies and goals
- Establish links between colleagues working on common topics
- Set organization for following and developing joint activities
- Set schedule for future meetings
- Set path for agreement on common Euclid SO projects on CMBXC
- Excite/inform Euclid scientists about SO
- Excite/inform SO scientists about Euclid
- Meeting with overview talks, short presentations & discussion sessions

Proposed schedule

.Day 1

1. **9:00** - Carlo Baccigalupi: **CMBXC in Euclid**
2. **10:00** - *Coffee Break*
3. **10:30** - Suzanne Staggs: **SO & AWG**
4. **11:30** - Giulio Fabbian: **Lensing in Euclid**
5. **12:00** - Blake Sherwin [with SO L3]: **Lensing in SO**
6. **12:30** - *Lunch*
7. **13:30** - Speaker TBD: Short Presentation 1 **TBD**
8. **13:45** - Speaker TBD: Short Presentation 2 **TBD**
9. **14:00** - Speaker TBD: Short Presentation 3 **TBD**
10. **14:15** - Speaker TBD: Short Presentation 4 **TBD**
11. **14:30** - Nabila Aghanim: **Thermal SZ and Euclid**
12. **15:00** - [SO SZ.1] Matt Hilton: **Thermal SZ in SO**
13. **15:30** - *Coffee Break*
14. **16:00** - Splinter Sessions
 - a. **Thermal SZ** - organizers Marian Douspis, Laura Salvati, SO SZ.1
 - b. **Lensing** - organizers Carlo Baccigalupi, Neelima Sehgal & others from SO L3
15. **17:00** - Summary of Splinters a & b

Color Code: **not up to date**

confirmed

remote participation

pending

Proposed schedule

.Day 2

Color Code: **not up to date**
confirmed
remote participation
pending

1. **9:00** - *Manu Schaan*: **Overview on Kinetic SZ**
2. **10:00** - *Coffee Break*
3. **10:30** - *Joop Schaye*: **Populations and Feedback in Euclid**
4. **11:00** - *Stefania Amodeo* [with SO SZ.2]: **Populations and Feedback in SO**
5. **11:30** - *Simone Ferraro* [with SO SZ.2] : **Kinetic SZ in SO / split between patchy and homogeneous TBD**
6. **12:00** - *Carlos Hernandez-Monteaquedo*: **Kinetic SZ with Euclid and CMB**
7. **12:30** - *Lunch*
8. **13:30** - Speaker TBD: Short Presentation 1 **TBD**
9. **13:45** - Speaker TBD: Short Presentation 2 **TBD**
10. **14:00** - Splinter Sessions:
 - a. **Populations and Feedback** - organizers *Andrea Lapi*, SO SZ.1 and SZ.2 TBC
 - b. **Kinetic SZ** - organizers *Joseph Kuruvilla*, *Rachel Bean*, SO SZ.2 TBC
11. **15:00** - Summary of Splinters a & b
12. **15:30** - *Coffee Break*
13. **16:00** - SISSA Colloquium by David Spergel: **New Avenues in the new decade for Cosmology**

Proposed schedule

Day 3

1. **9:00** - [SO FG.1] **CIB in SO**
2. **9:30** - Olivier Dore': **CIB in Euclid**
3. **10:00** - Speaker TBD: Short Presentation 1 **TBD**
4. **10:15** - Speaker TBD: Short Presentation 2 **TBD**
5. **10:30** - *Coffee Break*
6. **11:00** - SO mbs team, TBD: **SO Simulations**
7. **11:30** - Carmelita Carbone: **Euclid CMBXC Simulations**
8. **12:00** - *Lunch*
9. **13:00** - Speaker TBD: Short Presentation 1 **TBD**
10. **13:15** - Speaker TBD: Short Presentation 2 **TBD**
11. **13:30** - Marina Migliaccio: **CMBXC Likelihood in Euclid**
12. **14:00** - SO LT: **Likelihood in SO**
13. **14:30** - Splinter Sessions:
 - a. **CIB** - organizers [SO.FG.1], Olivier Dore'
 - b. **Likelihood** - organizers Fabien Lacasa, Paolo Natoli, SO LT
 - c. **Simulations** - organizers Carmelita Carbone, SO.MBS
14. **15:30** - Summary of Splinters a, b & c
15. **16:00** - Summary Panel

Color Code: not up to date

confirmed

remote participation

pending

Our desiderata from the Meeting

- Everybody happy
- Lots of science & New links and collaborations
- Build the science case that will help motivate MoU(s) and set up structure for the connections that will help build future working groups and collaborations

Speakers and Splinter Session Organizers

- Speakers:
 - Invited, to review broad topics investigated in the groups, highlight ongoing research
 - Contributed, to stimulate junior participants to show their own ongoing research
- Splinter Sessions Organizers:
 - Invite the relevant people & Make sure remote connection is available,
 - split time in discussions, and talks in case they're needed,
 - Prepare an executive summary!

Forthcoming Actions

- Defeat Covid19 (or achieve thermalization)
- Feedback from AWGs
- Finalize schedule
- Set dates for the meeting in the Fall
- Help splinter session organization
- ...

END