EXPERIMENTAL ASPECTS

L. Rodriguez & N. Ponthieu,
on behalf of WG3

SUMMARY

- Not possible to organize a dedicated workshop in the past two months
- On going discussions around BSide, PIXIE, Core+
- JP Maillard, N. Aghanim++ have lead parallel work on spectroscopy
- Started to work on a draft of the « instrument/ system » section of the RoadMap report

PRELIMINARY OUTLINE

1. CMB Science (Bernardeau, Binétruy)

2. Polarized foregrounds (Boulanger, Tristram)

3. **Instrumental and system aspects(Rodriguez, Ponthieu)**

   3.1.Mapping the CMB polarization anisotropies

      3.1.1. Overall considerations (Rodriguez, Ponthieu)

      3.1.2. Instrumental polarization (Bernard, Ponthieu)

      3.1.3. Focal plane unit (Rodriguez, Monfardini)

   3.2. Mapping the CMB spectral distortions (Maillard, Rodriguez, Ponthieu)

4. Ancillary science (Lagache, Douspis)

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- How do science targets and foreground subtraction drive the instrument design
- Recap on current and forecast experimental landscape (Ken's draft)

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- Requirements, perfs and cross-constraints on fsky, angular scales, ground/balloon/sat
- Ken's landscape summary and review of ground vs balloons vs sat

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   Systematic effects, known and new ones (Pilot, NIKA), requirements

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   What possibilities in terms of detectors : sensitivity, bands, FOV, power consumption, manufacturing cycles, time constants…

   3.2 Mapping the CMB spectral distortions (Maillard, Rodriguez, Ponthieu)

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   Constraints and prospects on spectrometer designs

   Talk by JP Maillard today

4. Ancillary science (Lagache, Douspis)

NEXT

- Gather inputs on this outline and will to contribute
- tex draft on the SVN repo
- Organize a series of progress status telecons with WG leaders to coordinate the redaction ?