Conclusions

- Planck has definitely set a milestone in the history of the CMB: the ultimate temperature anisotropy dataset and opened a new era for polarization
- The frontiers of Cosmology and Fundamental Physics are still far to be reached
- Planck has certainly been the driving force for growth of the Italian CMB community and to its international leading role in the field
- To maintain and increase this leading role synergies with other communities are crucial
- Technological Planck's legacy (optics, microwaves, mmwaves, cryogenics) and future developments need to be transferred to the Italian Industry
- The legacy of Planck cannot be dispersed





CONCLUSIONS

We wish to propose a roadmap, to be discussed with ASI:

1. Completion of the ongoing ASI-funded missions LSPE and OLIMPO in the short term (2016-2020);

2. Strong support aimed at the acquisition of a leading role of Italy in the forthcoming CMB satellite mission of ESA/M5;

3. Strong support, in coordination with INAF and INFN, to Italian participation to ground-based CMB experiments, preparatory and complementary to space;

4. Definition of a pre-phase A study for a polarimetric stratospheric balloon in the medium timescale (2020-2025), to complement ground based Stage-IV.

Other key issues:

- Data archiving and maintenance of CMB data (Planck, and more)
- Technological development, industry involvement, commercial applications
- High-level education: PhD, post docs, young researchers









HGMEX

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Reno Mandolesi – The Planck Legacy – New Challenges in CMB studies - ASI 30 March 2016