

<b>PROJECT: Studi di Cosmologia</b>		<b>WP REF.: 5-6X2</b>
<b>WP TITLE: CMB calibration and SRT</b> <b>SUB-CONTRACTOR: Dip. Fisica / Università di Milano Bicocca</b> <b>START EVENT: KO</b> <b>END EVENT: RF</b> <b>WP MANAGER: Massimo Gervasi</b>		<b>Sheet: 1 of 1</b>  <b>Issue Ref: 1</b> <b>Issue Date: 01/09/2016</b>

## 1. OBJECTIVES

- A detailed survey of sky calibration sources for CMB polarization experiments, procedures and strategy of observation with CMB experiments and with SRT.
- A study of the accuracy achievable in the calibration of CMB polarization signals using sky sources, through the observation of few representative sky sources with SRT.

## 2. INPUTS

- Contract and Technical Annex
- Work plan & Schedule
- Instrumental responses and specification data sheets of SRT
- Public documentation of relevant sky calibration sources

## 3. TASKS

*Main collaborations: all nodes*

- Identification of procedures and strategies to observe and characterize sky calibration sources with SRT
- Identification of sky sources to be observed as calibration signal for CMB polarization experiments
- Observation and study of few representative sky sources at SRT in intensity and polarization, in the available frequency bands, using the available receivers
- Support to LSPE/STRIP data analysis, providing supplementary information on sky calibration sources

## 4. OUTPUTS

### **Deliverables**

- A recommendation of the procedures and strategies to observe sky calibration sources by CMB polarization experiments and by SRT for supporting them
- A list of the most representative sky sources to be used as calibration signal in CMB experiments and their most relevant features
- An estimation of the accuracy achievable in the calibration of the CMB signal using sky sources.



## **5. SCHEDULE**

### First Year, t0+6months

- Preliminary procedures and strategies to observe and characterize sky calibration sources

### First Year t0+12months

- Preliminary list of the most representative sky polarized sources to be used for CMB calibration.

### Second year, t0+18months

- Observation and study of the first representative sky source at SRT in intensity and polarization.

### Second year, t0+24months:

- Updated observation procedures and strategies and updated list of sources

### Third year, t0+30months:

- Observation and study of the most representative sky sources at SRT in intensity and polarization.

### Third year 2<sup>st</sup> Semester:

- Final recommendations for procedures and strategies to observe and characterize sky calibration sources, final list of the most representative sky polarized sources.

