

# Appendix D: Constitution for the Gould Belt Consortium

## 1 Participants and time contributions

1. The Herschel (SPIRE/PACS) survey of nearby molecular cloud complexes (“Gould Belt survey” for short) is a Guaranteed Time Key Project jointly proposed by the SPIRE and PACS consortia and the Herschel Science Center (HSC).
2. The total observing time is 252 hr of SPIRE GT + 170 hr of PACS GT + 40 hr of HSC GT = 461 hr, based on the following time contributions:
  - a. 235 hr of SPIRE GT from SPIRE Specialist Astronomy Group 3 (SAG 3)
  - b. 17 hr of SPIRE GT from SPIRE SAG 4
  - c. 70 hr of PACS GT from CEA Saclay
  - d. 70 hr of PACS GT from INAF-IFSI Rome and INAF-Arcetri
  - e. 20 hr of PACS GT from KU Leuven
  - f. 9 hr of PACS GT from MPA Heidelberg
  - g. 40 hr of HSC GT
3. New participants to the project, carrying a contribution of additional observing time, will be proposed by either of the two Co-PIs of the project and approved by the simple (half+1) majority of the joint Project Science Team (see below).

## 2 Management of the Project

1. The project shall be led by two Co-PIs and a joint Project Science Team. The joint Project Science Team shall consist of the combination of two Project Science Teams, one for the SPIRE Consortium and one for the PACS Consortium, plus additional members representing the other participants in the project such as the HSC (see § 2.5 below).
2. The two Co-PIs of the joint project shall be Dr. Philippe André (CEA) and Dr. Paolo Saraceno (IFSI).
3. In the occurrence of resignation, impossibility or inability whatsoever to carry out duties, of one of the Co-PIs, he will nominate, in consultation with the relevant groups, an alternate Co-PI with adequate managerial and scientific qualifications, chosen from within the relevant group. In case the resigning Co-PI cannot for whatever reason proceed with nominating the substitute, the latter will be identified by the respective referent group.
4. The members of the Project Science teams (PSTs) shall be nominated by the Co-PIs. The detailed composition shall reflect the institutional contributions to the total of the program observing time according to the following scheme:
  - a. The SPIRE PST shall have members from SPIRE SAG 3, including the two SAG coordinators, and shall have nine votes. The membership shall be selected by consultation within SAG 3, and is expected to reflect the national and institutional balance of the SAG. The SPIRE PST shall only be involved in decisions of the PST involving SPIRE guaranteed time. *Apart from the two SAG coordinators, the current composition of the SPIRE PST is as follows:* Dr. Sylvain Bontemps, Dr. James Di Francesco, Dr. Sergio Molinari, Dr. Frédérique Motte, Dr. Leonardo Testi, Dr. Derek Ward-Thompson, Dr. Glenn White.

- b. The PACS PST shall have members from the PACS Consortium and shall have six votes expressed by Italy (2), France (2), Belgium (1) and Germany (1) . The PACS PST shall only be involved in decisions of the PST involving PACS guaranteed time.
  - c. The two Co-PIs of the joint project shall be members of the PSTs.
  - d. A scientist can be nominated as member of both PACS and SPIRE PSTs. In this case, his/her vote shall weigh double.
5. The HSC shall be represented in the joint PST with two votes (TBC).
6. New participants to the project (see § 1.3 above) shall be represented in the joint PST with a number of votes proportional to the additional observing time they contribute to the project.
7. The two Co-PIs, in consultation with the joint Project Science Team, will resolve all possible controversies that are not explicitly regulated by this document.

### **3 Use of Observing Time**

1. Observing time remains property of the contributing group according to the rules of the specific instrument consortia.
2. The initial observing time allocation for each instrument and selected target region will be according to the present Proposal.
3. Since the spacecraft or instrument performances (availability of observing modes, changes in instrument sensitivity, etc.) may change from the time the proposal is submitted, it will be possible, within the limits and rules imposed by the Herschel Science Management Plan and the Herschel Science Team, to:
  - a. re-arrange the relative time allocation among the two instruments
  - b. re-arrange the relative time allocation among the selected target regions
  - c. modify or drop regions from the initial target list presented in this proposal
  - d. insert new target regions
  - e. design of the observing strategy and selection of the instrument modes
4. Any of the change actions listed in point 3 shall be supported by motivated scientific reasons, and shall be organised by the two Co-PIs subject to the approval of the holders of the involved observing time.

### **4 Scientific Responsibilities**

1. For each specific target region, the two Co-PIs, in consultation with the joint Project Science Team, shall nominate two scientists to lead all aspects of the work related, one for each of the two instruments.
2. On the PACS side, the assignment of leadership roles will reflect national contribution to total PACS observing time, also taking into account the observing time required for each specific region. On the SPIRE side, the assignment of leadership roles will take into account the expertise of individuals, their contributions to the project, and the balance of institute and national interests within the SPIRE consortium, as well as the observing time required for each specific region.

## 5 Execution of the Observations and Data Processing

1. The following aspects concerning the execution of the observations are identified as critical and are hereby regulated:
  - a. implementation of AOTs and establishing the schedule for AOT execution priorities within the single regions
  - b. pipeline and post-pipeline data processing options
2. The sole responsibility for any decision related to the above aspects, for each selected region and for each instrument, will stay with the responsible individuals identified in §4, in agreement with the two Co-PIs. The individuals are expected to consult the relevant scientific groups in the exercise of this responsibility.
3. The detailed timeline of the SPIRE GT observations shall be decided by the SPIRE PST with a qualified majority of at least 2/3 of the total votes. In case the required majority is not reached, the decision shall be taken jointly by the two Co-PIs.
4. The detailed timeline of the PACS GT observations shall be decided by the PACS PST with a qualified majority of at least 2/3 of the total votes. In case the required majority is not reached, the decision shall be taken jointly by the two Co-PIs.

## 6 Data Rights

1. The data rights relative to the SPIRE GT data and PACS GT data from the project shall be governed by the rules of the SPIRE and PACS consortia, respectively (see next two items for details).
2. The SPIRE GT data from the project (taken with any Herschel instrument) shall be the property of the SPIRE Co-Investigators until the expiry of the proprietary period. The detailed data rights of individual SAG 3 and SAG 4 members shall be according to the SPIRE constitution.
3. Until the expiry of the proprietary period, the PACS GT data from the project (taken with any Herschel instrument) shall be the property of CEA Saclay, IFSI Rome, INAF Arcetri, KU Leuven, and MPA Heidelberg according to the distribution of PACS responsibilities given in the proposal (§4). Special case: The PACS GT data taken in the Taurus and Polaris flare regions by CEA Saclay shall be made available to IAS Orsay.
4. Until the expiry of the proprietary period, the HSC GT data from the project shall be the property of the HSC.
5. During the proprietary period, the sub-teams owning the SPIRE and PACS data, respectively, of a given region are strongly encouraged to collaborate. In the context of such bi-lateral collaborations, access to the SPIRE or PACS data of a particular region will be given for consultation to participants actively involved in the reduction/analysis of other data from the project on the same region, pending authorization of the leading scientist for each region and instrument as defined in §4.

## 7 Publication Rights

1. During the proprietary period, SPIRE SAGs 3 & 4 shall have exclusive rights concerning the publication of SPIRE GT data from the project. The detailed publication rights of individual SPIRE SAG 3 and SAG 4 members on the SPIRE GT data from the project shall be according to the SPIRE constitution.
2. During the proprietary period, CEA Saclay, IFSI Rome, INAF Arcetri, KU Leuven, and MPIA Heidelberg shall have exclusive rights concerning the publication of PACS GT data from the project, according to their respective PACS responsibilities as given in Table 3 of the proposal.
3. During the proprietary period, the HSC shall have exclusive rights concerning the publication of project data taken with HSC GT.
4. Collaborations between the sub-teams working on the SPIRE and PACS data of the same region leading, e.g., to common SPIRE/PACS publications on that region, are strongly encouraged. The joint Project Science Team shall be kept informed of any collaboration/agreement initiated on a given region during the proprietary period. For each region, such a collaboration will acquire exclusive publication rights within the “Gould Belt” consortium until 1 year after public release of the last data from the project on that region.