## **MONDAY PLENARY**

#### Programme outline (times in CEST)

Monday - 08:00-13:00 plenary

08:00-08:45

Opening by Peter (30min + 15min)

- General summary of activities since January 2020
- Mission concept: Observatory vs. Survey-type
- Yellow Book
- Goals for this meeting
- "Conference photo": all participants should switch on their videos for this so that a number of

screenshots can be taken

08:45-09:45

Current mission status from ESA and JAXA

- 08:45-09:15

ESA (Jacques) (20 min + 10 min)

- 09:15-09:45

JAXA (Toru) (20 min + 10 min) Note: Toru not available 10-12 CEST BREAK

10:00-11:30

Current understanding of instrument capabilities, specifically highlighting any changes since March affecting science goals (each 20min + 10min)

- 10:00-10:30

SAFARI (Peter, also on behalf of SAFARI systems team)

- 10:30-11:00

SMI (Hidehiro or Takehiko)

- 11:00-11:30

B-BOP (Marc) BREAK

11:45-13:00

Q&A session with towards "panel" of any speaker or towards instrument experts on any topic presented during Monday's plenary or otherwise. To be chaired by Peter.

13:00 End of Monday

# **TUESDAY SPLINTERS**

Tuesday - 08:00-13:00 splinters for Galaxy Evolution, Physics of Galaxies, Planet-forming systems

1. **08:00 – 09:45** Galaxy Evolution // Physics of Galaxies // Planet-forming systems BREAK (*Note: Planet-forming systems will have slightly different break times*)

- 2. 10:00 11:30 Galaxy Evolution // Physics of Galaxies // Planet-forming systems BREAK
- 3. 11:45 13:00 Galaxy Evolution + Physics of Galaxies // Planet-forming systems 13:00 End of Tuesday

# **Splinter Agendas**

**Galaxy Evolution Splinter** 

**Physics of Galaxies Splinter** 

Planet-forming systems

## **GALAXY EVOLUTION**

#### **Tuesday 15 September**

#### Introduction and outline of the meeting

8:00 - 8:30 D. Elbaz, L. Spinoglio, T. Nagao and K. Kohno

#### Gaining the full 3D perspective on Star Formation and Black Hole accretion

[C. Gruppioni & G. Rodighiero]

8:30 – 9:00 Descoping the spectrophotometric surveys: a revision of the reference program. 9:00 – 9:45 Impact of the loss of SMI-CAM and SMI-LR ability to replace SMI-CAM for imaging.

9:45 - 10:00 Break

10:00 - 10:30 YB revision, figure updates.

### Establishing the role of obscured BH-growth in the evolution of galaxies

[F. Pozzi, C. Vignali]

10:30 – 11:00 Synergies Athena/SPICA without SMI-CAM. What can be recovered using SMI-LR as an imager?

11:00 - 11:30 Yellow book updates, changes in figures.

11:30 - 11:45 Break

#### The origin and evolution of large-scale coherent magnetic fields in galaxies

[M. Bethermin]

11:45 – 12:10 Is a B-BOP polarimetric only survey useful/feasible? Possible implementation. 12:10 – 12:30 YB revision. Shall we group all polarization science in a separate section to strengthen the originality of this aspect of SPICA?

#### White papers, how are they affected by the descope?

12:30 – 13:00 L. Barchiesi, L. Bisigello, L. Ciesla, J.A. Fernández-Ontiveros, ...

# **PHYSICS OF GALAXIES**

### **Tuesday 15 September**

08:00 Overview of the program and goals of this meeting (Floris)

08:15 WP1: Feedback & quenching (Tanio, Eduardo)

08:45 WP2: Low metallicity (Vianney)

09:15 WP3: HD (Hidehiro -> Floris)

09:45 Break

10:00 WP4: Extraplanar gas (Alberto -> Annie)

10:30 WP5: Dust (Fred, Mikako)

11:00 WP6: B-fields (Rosita)

11:30 Break

11:45 Discussion: How to descope to a 1.8m mirror

13:00 End

# **PLANET-FORMING SYSTEMS**

#### **Tuesday 15 September**

8:00 – 8:15 – update from SST/questions by WG on new situation

8:15 – 10:00 – short presentations from each "survey" of the core program (10+10 each, leave time for discussions)

- Mineralogy survey (Mitsuhiko)
- - HD survey/water survey/CO ladder (Pablo) Snowline survey (Hideko)
- - Mass loss survey (Brunella)
- - Isolated Debris disks gas/ice survey (Mark)

10:00 - 10:20 - coffee break (we could set up breakout rooms for smaller discussion)

10:20 – 11:00 – questions to SMI (Ishihara-san) and SAFARI (Willem Jellema) experts 11:00 – 12:00 – strategy for the YB (changes in core program, key science?)

12:00 – 12:20 – short break (we could set up breakout rooms for smaller discussion) 12:20 – 13:00 – work plan for coming 3 months

# **WEDNESDAY SPLINTERS**

Wednesday - 08:00-13:00 splinters for Galaxy Evolution, Physics of Galaxies, ISM and SF

- 1. **08:00 09:45** Galaxy Evolution + Physics of Galaxies // ISM and SF BREAK
- 2. **10:00 11:30** Galaxy Evolution // Physics of Galaxies + ISM and SF BREAK
- 3. 11:45 13:00 Galaxy Evolution // Physics of Galaxies // ISM and SF 13:00 End of Wednesday

# **Agendas**

**Galaxy Evolution-2** 

**Physics of Galaxies-2** 

**ISM** and **Star Formation** 

## **GALAXY EVOLUTION -2**

#### Joint Galaxy Evolution / Physics of Galaxies session

8:00 - 8:45

#### Characterising the feedback mechanisms that quench Star Formation

[E. González-Alfonso & M. Pereira-Santaella]

8:45 - 9:00 How the FTS program will be implemented?

9:00 - 9:30 YB revision.

#### Tracing the build-up of Heavy Elements over the last 10 Gyr

[J.A. Fernández-Ontiveros]

9:30 – 10:00 How the spectroscopic survey will cover chemical evolution. 10:00 – 10:15 YB revision.

10:15 - 10:30 Break

#### Following dust evolution from reionization to the present-day Universe

[S. Gallerani & E. Egami]

10:30 – 10:45 A revision of the core program. Is high z still on reach?

10:45 – 11:00 Lensed galaxies, possible implementation.

11:00 - 11:30 YB revision.

11:30 - 11:45 Break

#### Open discussion

11:45 - 12:30

#### **Summary**

12:30 - 13:00 D. Elbaz, L. Spinoglio, T. Nagao and K. Kohno

# **PHYSICS OF GALAXIES 2**

### Wednesday 16 September

08:00 Recap yesterday's achievements

### Joint sessions with other programs (in any order):

08:15 galEvol (focus on magnetic fields)

08:45 ISM/SF (B-fields + dust evolution)

09:45 Break

### Discussion with instrument teams (can be joint with other programs):

10:00 SAFARI

10:30 SMI

11:00 BBOP

11:30 Break

11:45 Discussion (standalone / joint)

13:00 End

# ISM/SF WG

### 16 September (Wednesday)

#### 08:00 General Introduction

- Overview of impact of the new telescope design (Takashi Onaka)
- - Wide area survey (Sylvain Bontemps)

## 09:00 Joint discussion with Physics of Galaxies on magnetic fields and dust physics

• - Preparation of the YB

#### 10:00 Break

### 10:20 Revised observing program

- 10:20 Filament observations in nearby clouds (Philippe André)
- 10:40 Observations of massive filaments (Sergio Molinari/Davide Elia)
- 11:00 Intermittency (Pierre Lesaffre/Francois Boulanger)
- 11:20 YSO spectroscopy (Brunnela Nisini)

#### 11:40 Break

12:00 Discussion on prioritization of the programs and YB preparation

13:00 End

## **THURSDAY PLENARY**

#### Thursday - 08:00-13:00 plenary

08:00-10:00

30 min per WG = 15 min presentation on concrete actions and tasks for coming weeks as discussed and agreed during the meeting + 15 min discussion

- 08:00-08:30

Galaxy Evolution (David, Kotaro, Luigi, Tohru)

- 08:30-09:00

Physics of Galaxies (Floris, Hidehiro\*, Marc, Jesus\*\*)

-09:00-09:30

ISM and Star Formation (Takashi, Marc, Matt)

-09:30-10:00

Planet-forming systems (Inga, Mitsuhiko, Hideko)

\* Hidehiro not available on 17 September \*\* Jesus not available on 15-17 September

BREAK

10:15-11:30

Discussion on science balance between key areas + mission concept (Observatory, core/reference programme approach) – to be led by Peter

**BRFAK** 

11:45-13:00

General Q&A (questions that couldn't be answered on the spot during "scheduled slots with instrument experts" can also be addressed here) – to be led by Peter

13:00 End of Thursday