Dear colleague,

This is the second circular of the **Planetary Exploration, Horizon 2061 Synthesis Workshop** to be held on June 05-07, 2019 at the "Université Paul Sabatier", Toulouse, France.

SCOPE

"Planetary Exploration, Horizon 2061" is a long-term foresight exercise initially proposed by the Air and Space Academy and led by scientists, engineers and technology experts heavily involved in planetary sciences and in the space exploration of the Solar System. Its ultimate objective is to draw up to the 2061 horizon a long-term picture of the four pillars of planetary exploration:

1. our *major scientific questions* on planetary systems;
2. the different *types of space missions* that we need to fly to address these questions;
3. the *key technologies* we need to master to make these missions flyable;
4. the ground-based and space-based *infrastructures and services* needed to *support these missions* and to *enhance the overall scientific return of planetary exploration.*

The Horizon 2061 exercise is being developed in three steps, e.g. three international meetings of planetary science and exploration players and experts who design the four pillars together.
A document summarizing the overall objectives and rationale of Horizon 2061 and the main inputs of the first and second steps can be found here: http://horizon2061.cnrs.fr/wp-content/uploads/2019/01/Horizon-2061_Summary_English-V6.pdf

- The first step, a joint ISSI-Europlanet forum (ISSI, Bern, September 13th to 15th, 2016) led to a tentative formulation of six major scientific questions (pillar 1) and of a set of key observations needed to address them;
- The second step, a community workshop on "Technologies and Infrastructures for Planetary exploration" hosted by Ecole Polytechnique Fédérale de Lausanne (EPFL) from April 23rd to 25th, 2018, laid initial foundations for pillars 3 and 4.
- The third step, the **Planetary Exploration, Horizon 2061 Synthesis Workshop** (June 05th to 07th, 2018, Toulouse, France) is designed to receive even broader inputs from the community of planetary exploration in complement to the outputs of the previous steps, and to **draw out of open discussions the broad characteristics of the four pillars and prepare the final report of the Horizon 2061 exercise to COSPAR.**

Participation to the Toulouse synthesis workshop is broadly open to all scientists and engineers, industry and space agencies, independently of their participation to the first two steps.

The information concerning Horizon 2061 is available on http://horizon2061.cnrs.fr

The Workshop: organizers, time and place

The **Planetary Exploration, Horizon 2061 Synthesis Workshop,** organized under the auspices of the Air and Space Academy and COSPAR, will be hosted by Université Paul Sabatier (Toulouse, France) from June 5th to 7th, 2019.
Its main local organizers will be the Institut de Recherche en Astrophysique et Planétologie (IRAP, CNRS-Université Toulouse III-CNES)) and the Observatoire Midi-Pyrénées (OMP).

Preliminary programme

The workshop will present and openly debate the scientific and technical contents of the four Pillars, using three complementary inputs:

- Short and synthetic summaries of preliminary conclusions from steps 1 and 2;
- A few invited talks addressing particularly important or insufficiently studied subjects related to one or several of the "pillars";
- New contributions from the participants.

The syntheses leading to a description of the four pillars for the COSPAR report will be done on the basis of open discussions moderated by a panel.

List of sessions:
ORAL SESSIONS:
Session 1: From Science questions to representative space missions (Pillar 1)
Session 2: From representative missions to key technical requirements (pillar 2)
Session 3: Enabling technologies (pillar 3)
Session 4: Infrastructures, services and collaborative programs (pillar 4)
Session 5: Implementation modalities and issues
Session 6: Discussion, conclusions and report drafting
POSTER SESSIONS
Student and early career science mission designs for the 2061 horizon
Space agencies/companies foresight visions and programs (some contributions may be oral)
Innovative ideas for the four pillars

Deadlines

Abstract submission and registration open:	January 14th, 2019
Abstract Submission deadline	April 15th, 2019
Online program	May 15th, 2019
Registration deadlines	
Early bird	April 15th, 2019
Regular fees	May 20th, 2019

Registration

All attendees of the workshop, including the invited speakers, are kindly asked to register.
Please fill in the registration form on https://h2061-tlse.sciencesconf.org/

Registration fees

220 € for registration before April 15th 2019 and 320 € after this date.
220 € for the students
The registration fee includes simple catering during the coffee breaks, the lunch on Thursday and Friday (buffet) and the dinner of Wednesday (Restaurant in the center of Toulouse).
Online payment by credit card.

Abstract submission

Please submit your abstract to the workshop on https://h2061-tlse.sciencesconf.org/
The selected abstracts will have the possibility for scientific presentation (poster or contributed talk). A template for abstract is available online. The abstract should not exceed 2 pages.

Analysis of all abstracts and final allocation between oral and poster (with due consideration of the authors' wishes) will be done by the SOC, in time for on-line publication of the final program on May 15th.

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