



Dear colleague,

This is the third circular of the **Planetary Exploration, Horizon 2061 Synthesis Workshop** to be held on September 11th to 13th, 2019 at the Institut Aéronautique et Spatial near CNES and OMP, 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/2019/05/H2061_Summary_V9_19-05-2019.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** (September 11th to 13th, 2019, 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 the Institut Aéronautique et Spatial (Toulouse, France) from September 11th to 13th, 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 summaries leading to a description of the four pillars for the COSPAR report will be prepared jointly by all participants on the basis of open discussions moderated by a panel.

List of sessions (ALL SESSIONS ORAL + POSTER)

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: Foresight visions and programs from agencies and industry

Session 6: Young Scientists’ contributions to the Horizon 2061 perspective

Session 7: Implementation modalities and issues

Session 8: Discussion, conclusions and report drafting

Deadlines

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| Abstract submission and registration open: | April 26 th , 2019 |
| Abstract Submission deadline | August 18 th , 2019 |
| Online program | August 26 th , 2019 |
| Registration deadlines | |
| Early bird | August 18 th , 2019 |
| Regular fees | September 9 th , 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

250 € for registration before August 18th 2019 and 320 € after this date.

220 € for the students

The registration fee includes simple catering during the coffee breaks and the three lunches on Wednesday, Thursday and Friday (buffet).

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 July 24th.

Contact

h2061-tlse@sciencesconf.org

Scientific Organizing Committee, Toulouse Synthesis Workshop

| NAME & Surname | E-mail | Affiliation |
|-----------------------|---------------------------------------|--|
| AL HASHMI Khaled | k.alHashmi@space.gov.ae | UAE Space Agency, UAE |
| ALVES Jorge | Jorge.alves@esa.int | ESA/ESTEC, The Netherlands |
| ANAND Mahesh | Mahesh.anand@open.ac.uk | OU, UK |
| BARABASH Stas | stas@irf.se | IRF, Sweden |
| BHARDVAJ Anil | Bhardwaj_SPL@yahoo.com | PRL, India |
| BLANC Michel - Chair | Michel.blanc@irap.omp.eu | IRAP, France |
| BLELLY Pierre-Louis | Pierre-louis.blelly@irap.omp.eu | IRAP, France |
| BOITHIAS Hélène | helene.boithias@airbus.com | Airbus, France |
| BOLTON Scott | sbolton@swri.edu | SwRI, USA |
| BOUSQUET Pierre | pierre.bousquet@cnes.fr | CNES, France |
| BROQUET Jean | jean.broquet@orange.fr | AAE, France |
| BUNCE Emma | ejb10@le.ac.uk | U. Leicester, UK |
| CAPRIA Maria Teresa | Mariateresa.capria@iaps.inaf.it | IASF, Italy; co-chair, COSPAR commission B |
| CASOLI Fabienne | fabienne.casoli@obspm.fr | LERMA, Obs. Paris, France |
| CHILDE Baptiste | Baptiste.childe@irap.omp.eu | IRAP and ISAE, France Young Scientists representative |
| DAOU Doris | doris.daou-1@nasa.gov | NASA/GSFC, USA |
| DEHANT Véronique | veronique.dehant@oma.be | ORB, Belgium |
| DEMONET Jean-François | jf.demonet@gmail.com | CHUV, Switzerland |
| FERRI Antonella Ferri | Antonella.Ferri@thalesaleniaspace.com | Thales Alenia Space, Italy |
| FLAMINI Enrico | enrico.flamini@unich.it | ASI, Italy |
| FOUCHET Thierry | thierry.fouchet@obspm.fr | Dir. PNP, LESIA, Obs. Paris, France |
| FOING Bernard | Bernard.foing@esa.int | ESA, The Netherlands |
| FREEMAN Antony | Antony.freeman@jpl.nasa.gov | JPL, USA |
| GRANDE Manuel | m.grande@aber.ac.uk | Aberystwyth, UK |
| GUDIPATI Murthy | murthy.gudipati@jpl.nasa.gov | JPL, USA |
| GUO Linli | guolinlidfh@spacechina.com | CAST, China |
| HAMMEL Heidi | hbhammel@aura-astronomy.org | AURA, USA |
| HARRI Ari-Matti | ari-matti.harri@fmi.fi | FMI, Finland |
| HEAD James | James_Head@brown.edu | Brown University, USA |
| HELLED Ravit | rhelled@physik.uzh.ch | ETH Zurich, Switzerland |
| IP Wing - Huen | wingip@astro.ncu.edu.tw | NCU, Taiwan |
| IVANOV Anton | anton.ivanov@epfl.ch | EPFL, Switzerland |
| KIM Kyeong Ja | kjkim@kigam.re.kr | KIGAM. South Korea |
| KNEIB Jean-Paul | jean-paul.kneib@epfl.ch | EPFL, Switzerland |
| KORABLEV Oleg | Korab.iki.rssi.ru | IKI, Russia ; chair, COSPAR Commission B |

| NAME & Surname | E-mail | Affiliation |
|-------------------------|---|---|
| KRUPP Norbert | krupp@mps.mpg.de | MPS Gottingen, Germany |
| LASUE Jérémie | Jeremie.lasue@irap.omp.eu | IRAP, France |
| LEBLANC François | francois.leblanc@latmos.ipsl.fr | LATMOS, France : pdt. Groupe SHM CNES ; INSU |
| LEBLEU Denis | denis.lebleu@thalesalieniaspace.com | Thales Alenia Space, France |
| LEBRETON Jean-Pierre | jean-pierre.lebreton@cnrs-orleans.fr | LPCEE, France |
| MACKWELL Stephen | mackwell@lpi.usra.edu; sjmackwell@gmail.com | USRA, USA |
| MADI Mohammad | mrmadi@gmx.ch | ISEF, Switzerland |
| MAKAYA Advenit | Advenit.makaya@esa.int | ESA/ESTEC, The Netherlands |
| MAURICE Sylvestre | Sylvestre.maurice@irap.omp.eu | IRAP, France |
| McCUBIN Francis | francis.m.mccubbin@nasa.gov | NASA/Johnson SFC, USA |
| McNUTT Ralph | Ralph.McNutt@jhuapl.edu | APL/JHU, USA |
| MIMOUN David | David.Mimoun@isae-supero.fr | ISAE-SupAero, France |
| MONTMESSIN Franck | Franck.Montmessin@latmos.ipsl.fr | LATMOS, France; Pdt Solar System WG, CNES |
| MOUSIS Olivier | Olivier.mosis@lam.fr | LAM, France |
| MUSTIN Christian | christian.mustin@univ-lorraine.fr | LIEC, Nancy; Pdt Exobiology WG, CNES |
| NAKAMURA Takuji | nakamura.takuji@nipr.ac.jp | NIPR, Japan; chair, COSPAR Commission C |
| ORI Gian Gabriele | giangabriele.ori@unich.it | Universita d'Annunzio, Pescara, Italy |
| PERINO Maria Antonietta | MariaAntonietta.Perino@thalesalieniaspace.com | Thales Alenia Space, Italy |
| PRETI Giampaolo | gi.preti@tin.it | Leonardo, Italy |
| PROCKTER Louise | prockter@lpi.usra.edu | LPI, USA |
| RAUER Heike | Heike.Rauer@dlr.de | DLR, Germany |
| ROCARD Francis | francis.rocard@cnes.fr | CNES, France |
| SCHERER Klaus | kls@tp4.rub.de | Ruhr-Universitat-Bochum, Germany ; chair, COSPAR commission D |
| SCHONBAECHLER Maria | mariasc@ethz.ch | ETH, Switzerland |
| SZEGO Karoly Szego | szego.karoly@wigner.mta.hu | KFKI, Hungary |
| TIAN Feng | tianfengco@tsinghua.edu.cn | MUST, China |
| TSUDA Yuichi | Tsuda.yuichi@jaxa.jp | ISAS/JAXA, Japan |
| UDRY Stéphane | Stephane.Udry@unige.ch | Obs. Genève, Switzerland |
| WESTALL Frances | westall@cnrs-orleans.fr | CNRS Orléans, France ; Chair, COSPAR PEX |
| ZONG Qiugang | qgzong@pku.edu.cn | Peking University, China |
| ZOU Yongliao | yongliao@nssc.ac.cn | NSSC, Beijing, China |