

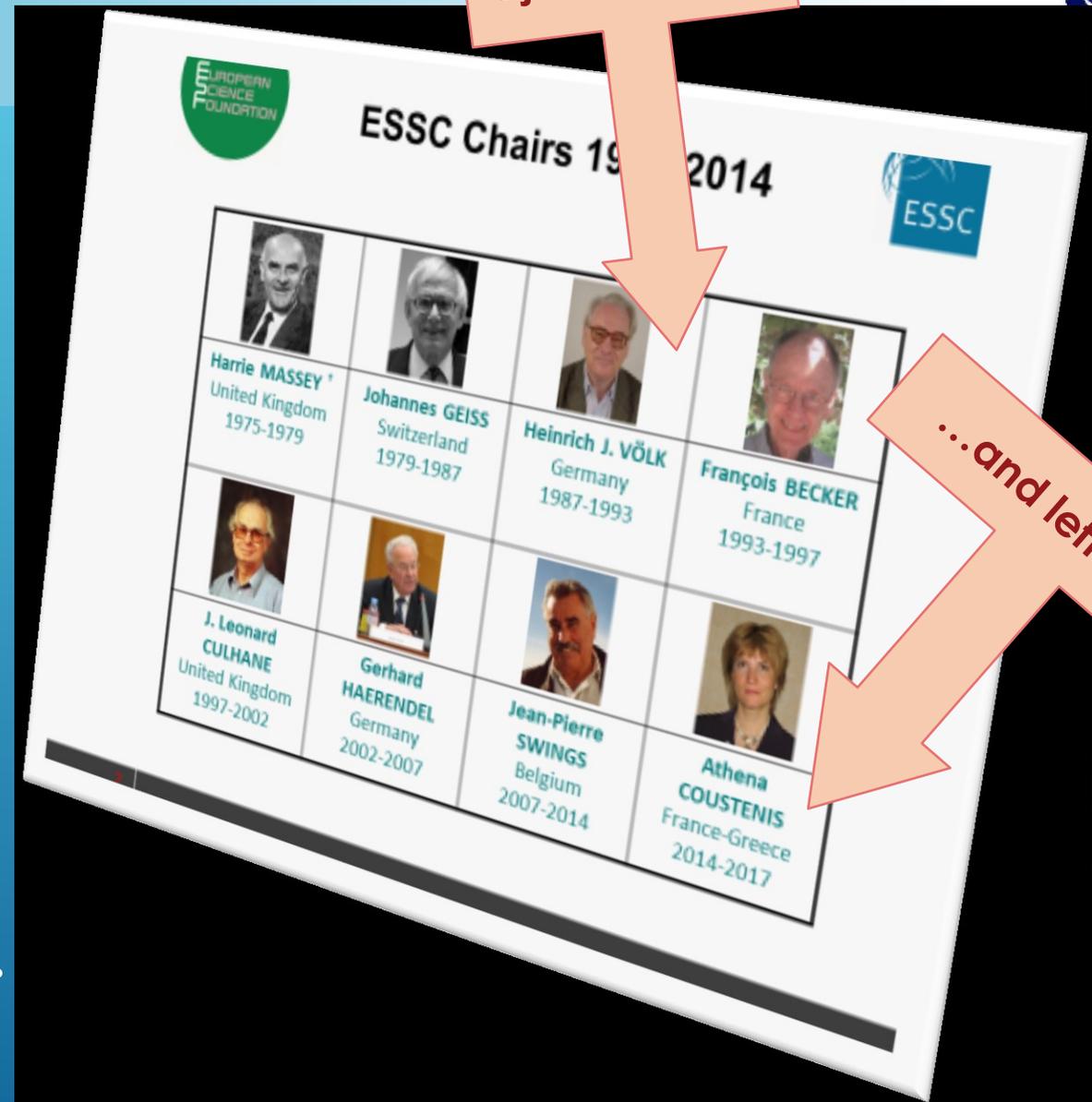


COSPAR BRIEFING TO ESSC-60

Jean-Claude WORMS
Executive Director

- ▶ ESSC holds its 60th plenary meeting!
- ▶ I started at the 13th meeting...
- ▶ Working with Athena has been a great experience
- ▶ The show goes on with COSPAR and PPP

I STARTED TO REMINISCE.



- ▶ 45 countries
- ▶ 13 International Scientific Unions



THE COSPAR WORLD

- The Bureau is composed of eight members, elected for 4 years (renewable once)
 - Len Fisk (USA), President (second term)
 - Karl Heinz Glassmeier (Germany) VP (first term)
 - Catherine Césarsky (France) (second term)
 - Masaki Fujimoto (Japan)
 - Manuel Grande (UK)
 - Charles Kennel (USA)
 - Pietro Ubertini (Italy)
 - Chi Wang (China)



BUREAU MEMBERS

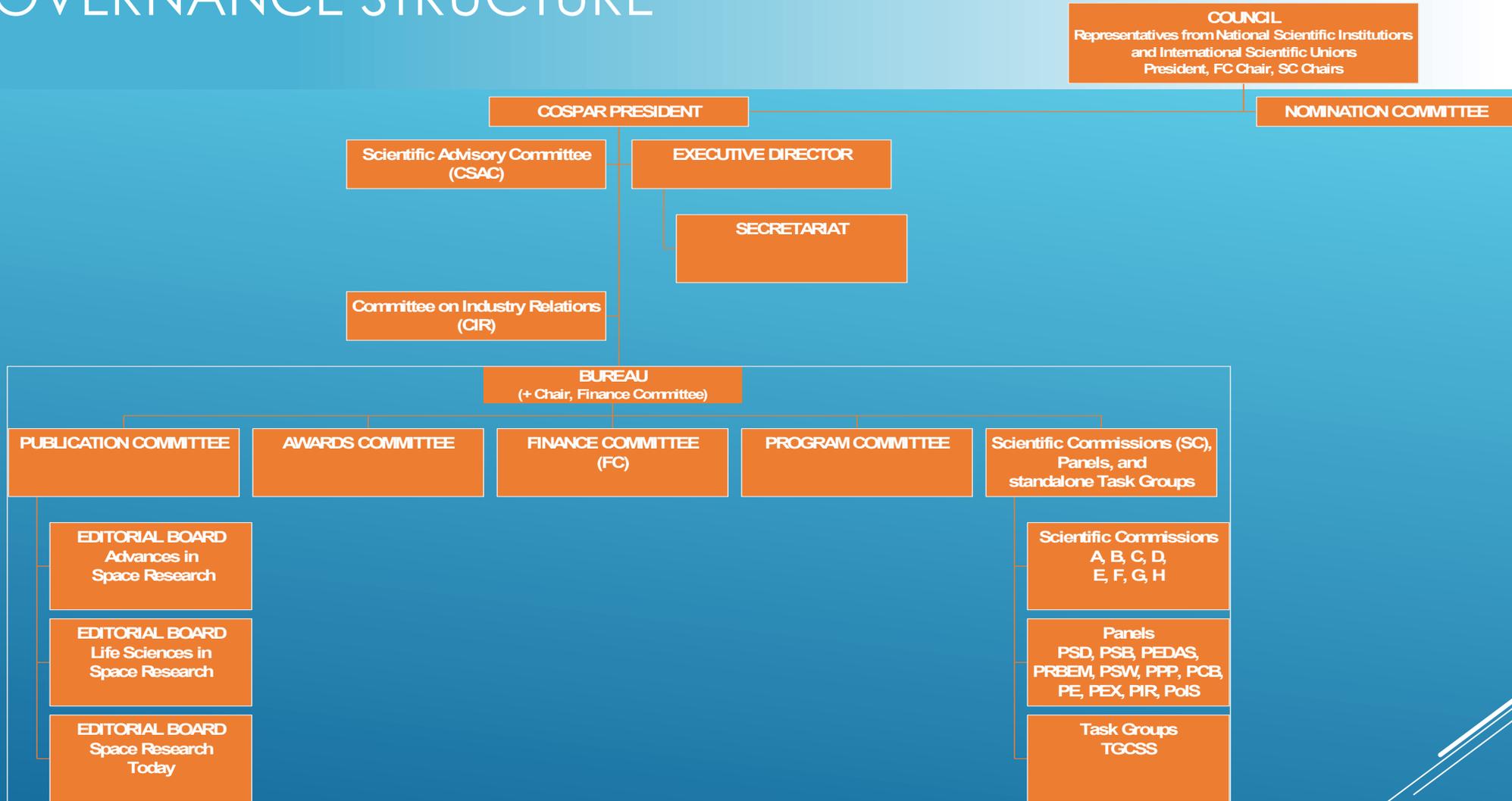


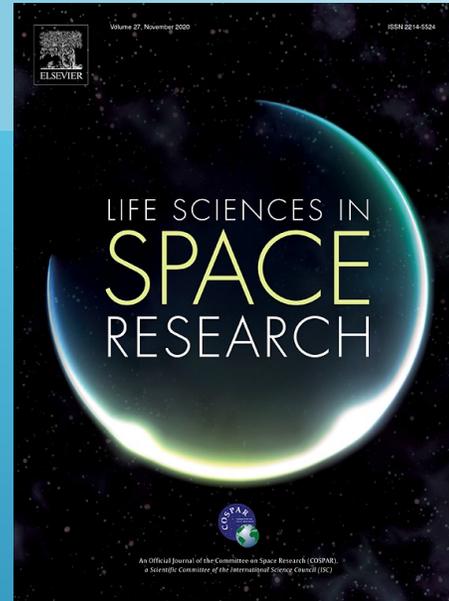
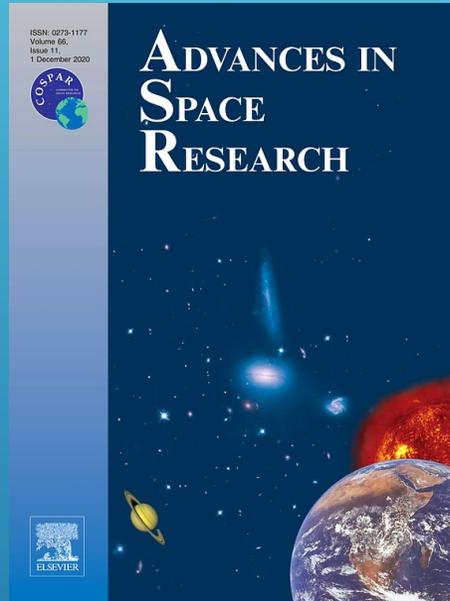
MIKHAIL PANASYUK, 1945 - 2020

COSPAR is saddened to announce the
demise of Professor Mikhail Panasyuk,
COSPAR Vice-President from 2018.

Condolences to info@sinp.msu.ru

GOVERNANCE STRUCTURE





COSPAR News
November 2020 Issue 6

Message from the Editors

Virtual meetings have now become the norm, enabling space scientists to exchange ideas and debate from the safety of their own home or office. The COSPAR 2021 Hybrid Assembly is a prime example, offering easier access to more events than when on site, regardless of your time zone. Not only will you be able to attend any given scientific event—and the live Q & A sessions—you'll also be able to access presentations made in events that normally would have been held in parallel during a standard "on-site" Assembly. This access will extend to the end of 2021.

The COSPAR 2021 Hybrid Assembly promises to be a truly global event, now offering 3,497 individual presentations after the renewed Call for Papers. This means there are more than 1,000 hours of scientific content to be delivered across multiple time zones over six days. And presenters who upload their pre-recorded summary "teaser" before 30 November 2020, accompanied preferably by their full presentation, are eligible for a reduced [Presenters Early Bird registration rate](#).

Here at HQ we're looking forward to the [six interdisciplinary lectures](#) that are lined up. In this issue we focus on [Hayabusa 2](#) (see [On the Radar](#) below) in anticipation of [Hitoshi Kuninaka](#) (ISAS/JAXA)'s update on [The Status of Hayabusa 2 Asteroid Explorer and Its Results](#). (No prizes for guessing what the connection with Australia is.)

We are excited you will be part of the first COSPAR Hybrid Assembly. Meanwhile, please take all the necessary measures to stay well.

Richard Harrison and Leigh Fergus

Space Science Snapshot:
NASA's [OSIRIS-REx](#) mission team received images this month confirming the spacecraft has collected more than 2 ounces (60 grams) of asteroid Bennu's surface material—thereby meeting one of its main mission requirements.

COSPAR PUBLICATIONS

UPCOMING
COSPAR BOOK SERIES
(ESSC projects?)

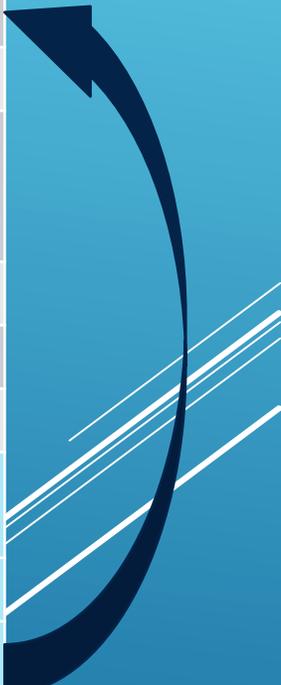


SC		Chair
A	Space Studies of the Earth's Surface, Meteorology and Climate	Ralph Kahn (USA)
B	Space Studies of the Earth-Moon System, Planets, and Small Bodies of the Solar System	Oleg Korablev (Russia)
C	Space Studies of the Upper Atmospheres of the Earth and Planets Including Reference Atmospheres	Takuji Nakamura (Japan)
D	Space Plasmas in the Solar System, Including Planetary Magnetospheres	Klaus Scherer (Germany)
E	Research in Astrophysics from Space	Pietro Ubertini (Italy)
F	Life Sciences as Related to Space	Tom Hei (USA)
G	Materials Sciences in Space	Marc Avila (Germany)
H	Fundamental Physics in Space	Claus Laemmerzahl (Germany)

SCIENTIFIC COMMISSIONS



PANEL	Chair
Technical Panel on Satellite Dynamics (PSD)	Heike PETER (Germany)
Panel on Technical Problems related to Scientific Ballooning (PSB)	Tetsuya YOSHIDA (Japan)
Panel on Potentially Detrimental Activities in Space (PEDAS)	Carolin FRUEH (USA)
Panel on Radiation Belt Environment Modeling (PRBEM)	Paul O'BRIEN (USA)
Panel on Space Weather (PSW) – hosting ISWAT	Maria KUZNETSOVA (USA)
Panel on Planetary Protection (PPP)	Athena COUSTENIS (France)
Panel on Capacity Building (PCB) sub-panel: Capacity Building Fellowship Program and Alumni (PCB-FA)	Carlos GABRIEL (Spain) Mariano Méndez (Netherlands)
Panel on Education (PE)	Michel BOER (France)
Panel on Exploration (PEX)	Frances WESTALL (France)
Panel on Interstellar Research (PIR)	Ralph McNUTT (USA)
Panel on Space and Social Sciences and Humanities (PSSH)	Isabelle SOURBES-VERGER (France)
Panel on Innovative Solutions (PoIS)	Eric SMITH (USA)
Task Group on establishing a Constellation of Small Satellites (TGCSS)	Daniel BAKER (USA)



- ▶ Industry Partners
 - ▶ Lockheed Martin (2020)
 - ▶ Northrop Grumman (2020)
- ▶ New Committee on Industry Relations, directly advising the COSPAR President (Nelson Pedreiro – LM)
- ▶ Conflict of Interest procedure included in COSPAR Bylaws, to apply to industry relations as well

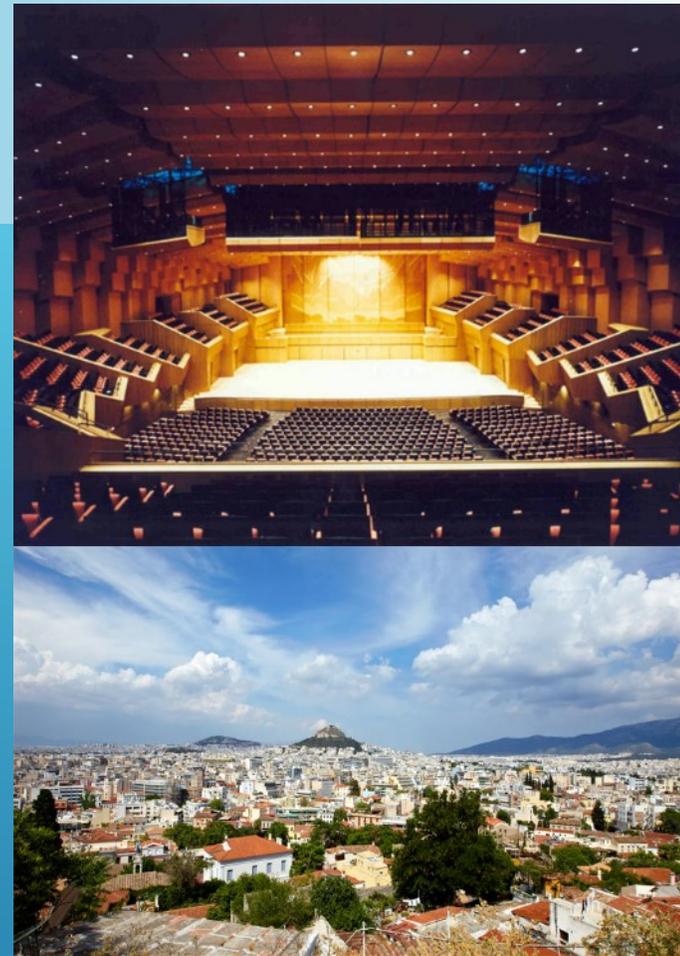
INDUSTRY CONNECTIONS



- ▶ Program completed in February, then the pandemic hit
- ▶ Assembly postponed to current dates (28 Jan – 4 Feb) as facilities were available in Sydney to accommodate the program
- ▶ August made it obvious that a largely in-person Assembly would be impossible, and we turned it into a hybrid format with essentially all of the international COSPAR community participating remotely
- ▶ Rather than an impediment to success we viewed this as an opportunity to offer a global, stimulating and rewarding event with far more opportunities for engagement and far more access to content than is normally possible in a large in-person Assembly
- ▶ The necessary technology has been implemented
- ▶ Pre-recordings of presentations are being completed (deadline 30 November)
- ▶ We hope COSPAR-2021-Hybrid will be one of the best COSPAR Assemblies, and a model for how to offer an international conference in this era of the pandemic, and perhaps, also in the future

SYDNEY ASSEMBLY GOES HYBRID, 24/7

- Athens (Greece) will host the 44th COSPAR Assembly in July 2022 for the first time ever



44TH COSPAR ASSEMBLY (2022)

- ▶ Proposal from South Korea to host COSPAR in Busan in 2024
- ▶ Decision will be taken “in Sydney”



45TH COSPAR ASSEMBLY (2024)

Local Organizing Committee

Chair : Prof. Amal Chandran, NTU, Singapore,
Prof. Edwin Teo, NTU, Singapore
Prof. Charles Elachi, Caltech/NTU, USA/Singapore
Mr. Lim Wee Seng, NTU, Singapore
Prof. Daniel Hastings, MIT,
Mr. Jonathan Hung, SSTA, Singapore
Ms. Lynette Tan, SSTA, Singapore
Prof. Alexander Ling, NUS, Singapore
Prof. Daniel Baker, UCB, USA
Prof. Loren Chang, NCU, Taiwan
Ms. Li Xin Leo, STB, Singapore

5th COSPAR Symposium
2021

15 – 19 November

Space Science with Small Satellites



SINGAPORE



- ▶ Increase Assembly value and attractiveness
- ▶ Extend partnerships with other organizations (e.g. ISC, GEO, UN, IAU, etc.)
- ▶ More constraining roadmaps (International Cooperation, Space Weather, Small Satellites, etc.) that influence space agencies and challenge them to better use COSPAR
- ▶ Strengthening joint activities of COSPAR and UNOOSA (PP, debris, SW)
- ▶ Improving COSPAR Support to Developing Space Programs (Capacity Building Workshops, support to early-career scientists)
- ▶ Associated Supporter program reconstituted to encourage engagement with science-based global industry
- ▶ Improving Communication (COSPAR News, social media, Book series) and Journals (ASR, LSSR, SRT)
- ▶ Diversity, Equality and Inclusion (DEI) policy

STRATEGIC PLAN



- ▶ March 2020: the pandemic arrived with a vengeance – all in-person meetings cancelled (Bureau, PC) and Assembly postponed
- ▶ ‘Never waste a good crisis ’ – how to position COSPAR for the post-pandemic era?
- ▶ April-June 2020: Conversations in Confinement (6 issues), broadening the original aim to include 2 main themes
 - ▶ Opportunity and obligation to help humanity in today's world
 - ▶ How do we function and pursue our mission in the context of a global travel ban?
 - ▶ We are now acting on important suggestions made during these CiC and adapting our meetings
- ▶ June 2020: Pledge to combat systemic racisms and other forms of discrimination – COSPAR statement, followed by action plan to promote DEI, including corresponding revisions to our Bylaws
- ▶ As year closes, what do we have to look forward to?
 - ▶ More of the same in the immediate future?
 - ▶ Will humanity learn from the pandemic? We can then help through the only way to deal with a global crisis (pandemic or climate change): international cooperation

CONVERSATIONS ABOUT THE FUTURE

- ▶ Planetary Protection
 - ▶ Critical issue today, with involvement of new industrial actors
 - ▶ NASA's Gateway initiative and Artemis Accords leading to reconsider Category 2 for the Moon (ongoing discussion within PPP)
 - ▶ COSPAR's PPP very active in updating planetary protection policy
- ▶ Space debris and light pollution from constellations
 - ▶ Issues bound to increase in magnitude with New Space
 - ▶ Science community's response (IAU, etc.)

ISSUES THAT CAN BECOME CRITICAL WITH NEW SPACE



- ▶ COSPAR ex officio in ESSC since 20 years, reciprocated in 2009 by then President Roger Bonnet
- ▶ Strong ties and joint project/proposals
- ▶ ESSC survey: establishing channels with COSPAR is considered by some members a Top-3 success for ESSC, also questioning how to better coordinate and influence each other's strategy and initiatives
- ▶ '*Work more with COSPAR*' is one of the 'O' in the SWOT analysis conducted by the ESSC Secretariat



ESSC AND COSPAR

▶ Science narrative

- ▶ How to manage encounters between scientists and society to galvanize action on the role of science and on major issues such as climate change (COP26)?
- ▶ A different space science narrative towards the general public?
- ▶ Science does not proceed in a democratic way, which makes it hard to reconcile its practice and methodology with a societal standpoint and approach
- ▶ How to provide more efficient advice to policy-makers, i.e. answers that are provided quickly and can be actionable?

▶ Detrimental activities in space and response by the community

- ▶ Planetary protection, space debris, light pollution
- ▶ What interaction with the private sector?

WHAT CAN WE DO BETTER TOGETHER – SOME ISSUES



THANK YOU VERY MUCH