# Mars Exploration Science Monthly Newsletter

Λ publication of the Mars Program Office and the Mars Exploration Program Analysis Group (ΜΕΡΛG)

November 2019

#### **Mars Science News**

#### MEPAG virtual meeting (VM7: November 13, 3-5pm EST)

The First Information Circular is available for the next <u>MEPAG virtual meeting (VM7)</u>, on Wednesday, November 13, 2019 at 3-5pm EST. This meeting is open to all members of the Mars science community, including international colleagues. The circular includes WebEx connection information.

Agenda items are expected to include updates about recent MEPAG activities, including Decadal Survey preparations, and the recent Planetary Advisory Committee (PAC) meeting. The agenda will also include reports about a recent Mars conference in China by Prof. Jim Head (Brown University), the Mars Extant Life conference, the recent NASA Planetary Protection Independent Review Board (PPIRB), and the newly-formed MEP-chartered Mars Architecture Strategy Working Group (MASWG). The VM7 agenda will be added soon to the MEPAG meeting website.

#### Request for mission concepts from the Mars Architecture Strategy Working Group

NASA has formed a Mars Architecture Strategy Working Group (MASWG), and this group would like to understand the types of mission concepts that could be feasible to launch in the period 2020-2035, in parallel with or following Mars Sample Return. They are asking the community to share high-level one-page descriptions of potential mission concepts with the working group. The goal is to understand the breadth of mission types and approaches in each size class. This is not an opportunity for funding, to get your mission concept into a queue, or to promote any single mission. All mission types up through New Frontiers cost class are requested.

Submitters should use the 1-page template (sent out previously to the Mars newsletter email list, or email <a href="MASWGcomments@jpl.nasa.gov">MASWGcomments@jpl.nasa.gov</a>. All inputs will be treated as confidential; submissions will be kept internal to the MASWG and will not be distributed to NASA HQ or to the community. Mission Concept inputs are due by the end of Friday, November 22.

Details about MASWG and this request will be discussed in the <u>MEPAG Virtual Meeting (VM7)</u> on Wednesday, November 13, along with a request for some broader community input.

#### MEPAG google spreadsheet to facilitate Decadal Survey white paper generation

MEPAG has created a google spreadsheet to facilitate collaboration and communication regarding community-generated white papers, as inputs to the next Planetary Science Decadal Survey. All members of the Mars community are welcomed to view or add information to this spreadsheet: to find additional authors for a white paper topic, to volunteer to assist with a white paper topic, or to share a relevant resource with the community. Additionally, the first tab includes links to other spreadsheets of this sort within the planetary community. We hope this will be a helpful resource for the Mars and general planetary community. If you have questions or comments about this spreadsheet, please contact mepagmeetinggs@jpl.nasa.gov.

Note that no white paper request or deadlines have yet been confirmed by the National Academies (NASEM) as the statement of task for the next Planetary Decadal Survey is still in work, but based on recent public comments (e.g., at the <u>September CAPS meeting</u>), it is expected that the solicitation for white papers will follow the same format as for the last Planetary Decadal Survey, and that they will be due ~February-May, 2020. Confirmed guidance from NASEM, once available, will be shared via the newsletter mailing list and added to the MEPAG DS resource pages, including this spreadsheet.

#### Report from the NASA Planetary Protection Independent Review Board

NASA established the Planetary Protection Independent Review Board (PPIRB) in response to a recent National Academies of Sciences, Engineering, and Medicine report and a recommendation from the NASA Advisory Council. The <u>PPIRB's report</u> assesses a rapidly changing environment where more samples from other solar system bodies will be returned to Earth.

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commercial and international entities are discussing new kinds of solar system missions, and NASA's Artemis program is planning human missions to the Moon and eventually to Mars.

The <u>report</u> discusses 34 findings and 43 recommendations from the PPIRB, which was chaired by planetary scientist Alan Stern of the Southwest Research Institute to address future NASA missions and proposed missions by other nations and the private sector that include Mars sample return, robotic missions to other bodies, eventual human missions to Mars, and the exploration of ocean worlds in the outer solar system.

Also, here's a message from PPIRB member Wendy Calvin (U Nevada, Reno) to the Mars Community: I'd like to thank those that contributed comments on Planetary Protection during the <u>MEPAG virtual meeting on Aug 28</u> and the short window afterwards via the Google form. I apologize for the short fuse but the PPIRB had a restricted window to generate our report. We considered all of your comments in our deliberations. Please tune in to the <u>MEPAG virtual meeting on Nov 13</u> for a presentation on the final PPIRB Findings and Recommendations.

#### Student travel award available for 3rd International Planetary Caves Conference

The NASA Mars Program Office has announced that travel funding awards for the 3rd International Planetary Caves Conference are available for up to 3 undergraduate and graduate students. This conference will be held February 18-21, 2020 in San Antonio, TX, USA. Students who are enrolled and attend a US institution, are at least 18 years of age, are engaged in Mars-related research relevant to this workshop, and have submitted a first-author abstract for presentation are eligible for this program. An application (including proof of submitted abstract) must be submitted by December 5, 2019 (same as the abstract deadline) to be considered for this funding. NASA Headquarters will make the selections and students will be notified January. For more information and the application, see http://mepag.nasa.gov/student.cfm?expand=student. Questions about this program should be directed to Dr. Serina Diniega (JPL/MPO).

### **Near-term Due Dates (next three months)**

Due	Project
November 11	First International Orbital Debris Conference (IOC) – Early Registration Deadline
November 13	Exoplanets in Our Backyard – Abstract Deadline
November 22	First International Orbital Debris Conference (IOC) – Registration Deadline
November 22	Preventing Harassment in Science - Pre-workshop Survey Deadline
November 30	IEEE Aerospace Conference – Early Registration Deadline
December 5	3rd International Planetary Caves Conference – Abstract and MPO Student Travel Grant Application Deadline
December 9	Ground and Space Observatories - Abstract Deadline
December 10	Ice Giant Systems 2020 – Abstract Deadline
December 13	Seventh International Conference on Mars Polar Science and Exploration – Early Registration Deadline
December 30	Seventh International Conference on Mars Polar Science and Exploration – Abstract Deadline
December 30	Seventh International Conference on Mars Polar Science and Exploration – Registration Deadline
December 31	36th International Geological Congress (IGC) – Abstract Deadline
2020	
January 7	51st Lunar and Planetary Science Conference – Abstract Deadline
January 10	Access to Space Workshop – Abstract Deadline
January 10	Access to Space Workshop – Registration Deadline
January 13	Exoplanets in Our Backyard – Early Registration Deadline
January 15	EGU General Assembly – Abstract Deadline
January 21	3 <sup>rd</sup> International Planetary Caves Conference – Early Registration Deadline
January 24	OPAG Meeting – Early Registration Deadline
January 26	OPAG Meeting – Registration Deadline

### **Upcoming Conferences**

- Only foreign and NASA-sponsored conferences will have an NCTS#; missing NCTS#s can be sent to Barbara Saltzberg (Barbara.A.Saltzberg@jpl.nasa.gov).
- Forecasting to NCTS is usually 60 days in advance for domestic meetings. If you are unsure whether an event is a conference or not, or when the forecasting deadline may be, please consult with your NASA Center conference forecasting/travel unit.

Fourth Quarter, 2019			
	November 5-8, 2019	Mars Extant Life: What's Next?	
	Carlsbad, NM, USA	https://www.hou.usra.edu/meetings/lifeonmars2019/	
	November 5-7, 2019	Asteroid Science in the Age of Hayabusa 22 and OSIRIS-REX	
	Tucson, AZ, USA	https://corex.lpl.arizona.edu/international-workshop	
	December 9-12, 2019 Sugar Land, TX, USA	First International Orbital Debris Conference (IOC) NCTS 38110-20	
		https://www.hou.usra.edu/meetings/orbitaldebris2019/	
	December 9-13, 2019	2019 AGU Fall Meeting, NCTS 37409-20	
	San Francisco, CA, USA	mailto:https://www.agu.org/fall-meeting	

2020 First Quarter			
	January 6-8, 2020	KICC: Rocky Worlds: from the Solar System to Exoplanets	
	Cambridge, England	https://www.kicc.cam.ac.uk/events/rocky-worlds-from-the-solar-system-to-exoplanets	
	January 13-17, 2020 Ushuaia, Tierra del Fuego,	7 <sup>th</sup> International Conference on Mars Polar Science and Exploration NCTS 39128-20	
	Argentina	https://www.hou.usra.edu/meetings/marspolar2020/	
	January 14-16, 2020	NASA Small Bodies Advisory Group (SBAG) meeting	
	Pasadena, CA, USA	https://www.lpi.usra.edu/sbag/meetings/	
	January 20-22, 2020	Ice Giants Systems 2020 NCTS 38573-20	
	London, England	https://ice-giants.github.io/	
		Outer Planet Assessment Group (OPAG) Meeting	
NEW	February 3-5, 2020 Houston, TX, USA	New for this year: One-page abstracts will be collected until February 12, 2020 and will be posted along with the presentations at the conclusion of the meeting. Both abstracts and presentations will appear in the Astrophysics Data System (ADS). <a href="https://www.lpi.usra.edu/opag/meetings/feb2020/">https://www.lpi.usra.edu/opag/meetings/feb2020/</a>	
	February 5-7, 2020	Exoplanets in Our Backyard	
	Houston, TX, USA	mailto:www.hou.usra.edu/meetings/exoplanets2020/	
	February 11-13, 2020	LPI Workshop: The impact of lunar dust on human exploration	
	Houston, TX, USA	https://www.hou.usra.edu/meetings/lunardust2020/	
	February 18-21, 2020	3 <sup>rd</sup> International Planetary Caves Conference	
	San Antonio, TX, USA	https://www.hou.usra.edu/meetings/3rdcaves2020/	
NEW	February 25-27, 2020 Laurel, MD, USA	Access to Space Workshop https://civspace.jhuapl.edu/News-and-Events/events/Access2Space/	
	March 2-6, 2020	Ground and space observatories: a joint venture to planetary science workshop NCTS 39529-20	
	Santiago, Chile	https://conference.almaobservatory.org/planets2020/	
	March 2-8, 2020	36th International Geological Congress (IGC)	
	Dehli, India	mailto:https://www.36igc.org/home	
	March 7-14, 2020	IEEE Aerospace Conference	
	Big Sky, MT, USA	https://www.aeroconf.org/	
	March 16-20, 2020	51st Lunar and Planetary Science Conference	
	The Woodlands, TX, USA	https://www.hou.usra.edu/meetings/lpsc2020/	
NEW	Phoenix, AZ, USA March 31-April 2, 2020	Preventing Harassment in Science: Building a community of Practice Toward Meaningful Change	
		https://www.hou.usra.edu/meetings/anti-harassment2020/organizers/	

Second Quarter, 2020				
	April 20-23, 2020 Seattle, WA, USA	ASCE Earth & Space Conference Symposium 2: Exploration and Utilization of Extra-Terrestrial Bodies <a href="https://www.earthspaceconference.org/symposium-2">https://www.earthspaceconference.org/symposium-2</a>		
	May 3-8, 2020 Les Houches, France	Workshop Mars V https://www.cosmos.esa.int/web/planet-mars-5/home		
NEW	May 3-8, 2020 Vienna, Austrian	EGU General Assembly https://www.egu2020.eu/		
	May 12-15, 2020 Alamosa, CO, USA	6 <sup>th</sup> International Planetary Dunes Workshop https://www.hou.usra.edu/meetings/dunes2020/		
	June 2-4, 2020 Orleans, France	Mercury 2020, Current and future science of the innermost planet  https://mercury2020.ias.u-psud.fr/main 1st.php		
	June 8-11, 2020 Paris, France	7 <sup>th</sup> Mars Atmosphere Modelling and Observations http://www-mars.lmd.jussieu.fr/paris2020/		

Third-Fourth Quarter, 2020			
	July, 2020	Launch window for the UAE EMM orbiter (Hope)	
	July 26-August 11, 2020	Launch window for the ESA-Russia ExoMars rover (Rosalind Franklin)	
	July 17-August 5, 2020	Launch window for the NASA Mars 2020 rover	
	August 15-22, 2020	43 <sup>rd</sup> COSPAR Scientific Assembly NCTS 35724-20	
	Sydney, Australia	https://www.cospar-assembly.org/	
	October 5-8, 2020	Martian Enigmas 2020	
	Houston, TX, USA	mailto:https://www.hou.usra.edu/meetings/martianenigmas2020/	

#### **Seasons on Mars**

	MY34	MY35	MY36
Start of Northern Spring / L <sub>s</sub> 0	03/23/2019	02/07/2021	12/26/2022
Start of Northern Summer / L <sub>s</sub> 90	10/08/2019	08/25/2021	07/13/2023
Start of Northern Autumn / L <sub>s</sub> 180	04/08/2020	02/24/2022	01/24/2024
Start of Northern Winter / L <sub>s</sub> 270	09/02/2020	07/21/2022	06/07/2024

Special holidays to consider when scheduling conferences/workshops/meetings

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Good Friday	4/19/2019	4/10/20	4/2/2021	04/15/2022
Rosh Hashanah	9/30/2019	9/19/20	9/7/2021	09/26/2022
Yom Kippur	10/09/2019	9/28/20	9/16/2021	10/05/2022
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, Canada	10/14/2019	10/12/20	10/11/2021	10/10/2022
Thanksgiving Day, U.S.	11/28/2019	11/26/20	11/25/2021	11/24/2022
Christmas Day	12/25/2019	12/25/20	12/25/2021	12/25/2022

#### **Editors**

David Beaty	David.Beaty@jpl.nasa.gov	818-354-7968
Serina Diniega	Serina.Diniega@jpl.nasa.gov	818-354-1487
Barbara Saltzberg	Barbara.A.Saltzberg@jpl.nasa.gov	818-354-0226

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Please send Mars Community Announcements and calendar items for inclusion in next month's newsletter to:

Barbara Saltzberg at Barbara.a.Saltzberg@jpl.nasa.gov

This newsletter (and all previous months') is also posted on the MEPAG website: <a href="http://mepag.jpl.nasa.gov">http://mepag.jpl.nasa.gov</a>

If you wish to withdraw from the electronic mailing list this newsletter is sent out to, please send an email from your email account to mepag-removesignup@ipl.nasa.gov.

To be added to this list and receive this monthly newsletter and other Mars Science announcements, or to update your MEPAG directory information (which contains the email list used for sending out this newsletter), please fill out the online form: <a href="mailto:mepag-signup@jpl.nasa.gov">mepag-signup@jpl.nasa.gov</a> (also linked at the bottom of the MEPAG website <a href="http://mepag.nasa.gov/">http://mepag.nasa.gov/</a>).