Mars Exploration Science Monthly Newsletter

A publication of the Mars Program Office and the Mars Exploration Program Analysis Group (MEPAG)

December 2014

Mars Science News

Invitation to the 30th MEPAG Meeting

February 24-25, 2015

Monrovia, CA (Los Angeles area)

Professor Lisa Pratt, MEPAG Chair, cordially invites attendance at the 2015 face-to-face meeting of the Mars Exploration Program Analysis Group (MEPAG), scheduled for 1.5 days, February 24-25, 2015, at the Double-Tree Hotel in Monrovia, CA. The meeting is open to all members of the Mars science community, including international colleagues.

Key discussion topics will include:

- Status of Mars exploration by NASA and other space agencies
- Interaction with the Human program (HEOMD)
- NASA and ESA landing site selection activities
- Proposed revision of the MEPAG Goals document.

The First Circular for this meeting is posted at http://mepag.nasa.gov/meetings.cfm?expand=m30. The Second Circular, containing hotel and webcast information, along with the agenda, will be posted there in the near-future.

Second Landing Site Workshop for the Mars 2020 Rover

August 4-6, 2015

Pasadena, CA (venue TBD)

This workshop will focus on further evaluation of candidate sites introduced at the first workshop (May 2014) as well as new candidate sites. The candidate landing sites emerging from this workshop will then be considered in more detail by the 2020 Project, Mars Program, and the Science Community. New sites may be proposed and discussed at the workshop, with the expectation that such new sites will be based in part on discoveries related to new data from MRO. Future workshops (beyond 2015) would further narrow the list of sites under consideration to a recommended landing site zone and (eventually) precise landing ellipse.

John Grant and Matt Golombek, Co-Chairs of the Mars Landing Site Steering Committee, encourage all members of the scientific community to participate in this activity, as robust input from the science community is critical to identifying the optimal landing site for the 2020 rover. The workshop announcement and results from the first workshop are posted on the Mars 2020 landing site website: http://marsnext.ipl.nasa.gov.

MEPAG Mailing List Updates

The Mars Program Office has recently updated the MEPAG mailing list (the one this newsletter is sent out to), including adding Mars aficionados who have attended recent MEPAG- and Mars-focused events. If you wish to withdraw from this electronic mailing list, please send an email from your email account to mepag-removesignup@jpl.nasa.gov. To be added to this mailing list, please send an email from your email account to mepag-signup@jpl.nasa.gov.

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Special Sessions at EGU

Abstract deadline is January 7.

PS 2.3: Mars Science and Exploration, a session in honour of Professors Gerhard Neukum and Collin Pillinger

The Mars Science and Exploration Session will address the latest results on the interior, surface, atmosphere and ionosphere of Mars from recent and ongoing Mars missions, such as Mars Global Surveyor, Mars Express, Mars Odyssey, Mars Reconnaissance Orbiter, MERs, Phoenix, Curiosity, MAVEN and Mars Orbiter Mission as well as the future exploration of the Red Planet. In particular, the session is primarily targeted at: (1) presentations on scientific investigations as well as theoretical models concerning the deep interior and subsurface structure and composition; the surface geology; the atmospheric composition, dynamics and climate; the ionospheric environment and its interaction with the solar wind; Phobos, water evolution, astrobiology and habitability of Mars; (2) discussions on scientific goals, long-term plans and proposed experiments for future robotic and human missions to Mars, and results obtained from ground-based measurements. Both broad solicited talks and contributed presentations will be included.

PS 2.4, Unraveling Mars: insights from mineralogy and geochemistry

Conveners: Damien Loizeau and Olivier Witasse

Several remarkable advancements have been achieved on the geology and mineralogy of Mars in recent years using orbital and surface instruments. Through the in situ measurements by SAM and CheMin on the Curiosity rover, we have been able to advance our understanding of chemistry and mineralogy from previous rovers and landers on the Red Planet. Coordinated analyses of multiple datasets from recent and ongoing missions is closing some of the gaps and inconsistencies in our perception of the geological history of Mars, including surface and subsurface geochemical processes. This session aims to foster discussion of the latest discoveries on the surface composition and processes of Mars, particularly focusing on the mineralogy and geochemistry of the Red Planet. We welcome submissions from the Mars community covering a broad range of mineralogy and geochemistry topics. We particularly encourage early career scientists and graduate students to join our session.

Conveners: Christian Mavris, Javier Cuadros, Janice Bishop, Joe Michalski, Jose Miguel Nieto

Near-term Due Dates (next three months)

Due	Project
January 5, 2015	Workshop on the Early Solar System Bombardment III Early registration deadline
January 6, 2015	Lunar and Planetary Science Conference Abstract deadline
January 7, 2015	European Geosciences Union General Assembly 2015 Abstract deadline
January 20, 2015	Ground and space observatories: a joint venture to planetary science Registration deadline
January 22, 2015	Venus Instrument and Laboratory Measurements Workshop Abstract deadline (update)
February 26, 2015	Comparative Tectonics and Geodynamics of Venus, Earth, and Rocky Exoplanets Abstract deadline
February 28, 2015	5th PCL Focus Days 2015 Author registration deadline
March 4, 2015	Astrobiology Science Conference 2015 (Abscicon) Abstract deadline

Upcoming Conferences and Workshops

Fourth Quarter, 2014			
New!	December 11-12, 2014 ALTEC, Turin, ITALY	2nd ExoMars 2018 Landing Site Selection Workshop	
	December 15-19, 2014 San Francisco, CA, USA	AGU Fall Meeting http://fallmeeting.agu.org/2014/	

		December 2014			
First Quarter, 2015					
	January 13-15, 2015	Earth-Life Science Institute 3rd International Symposium http://www.elsi.ip/en/research/activities/symposium/2015/01/sympo-03.html			
	Tokyo, JAPAN February 4-6, 2015	Workshop on the Early Solar System Bombardment III			
	Houston, TX, USA	http://www.hou.usra.edu/meetings/bombardment2015/			
New!	February 24-25, 2015	30th MEPAG Meeting			
	Monrovia, CA, USA	http://mepag.nasa.gov/meetings.cfm?expand=m30			
Correct-	February 24-26, 2015	Planetary Protection Workshop			
ed	Kennedy Space Center, FL, USA	http://planetaryprotection.nasa.gov/course			
	March 2-5, 2015 Santiago, CHILE	Ground and space observatories: a joint venture to planetary science http://www.eso.org/sci/meetings/2015/Planets2015.html			
	March 7-14, 2015	IEEE Aerospace Conference			
	Big Sky, MT, USA				
	March 11-12, 2015	Mars Express Science Working Team Meeting			
	Location TBA	For more information, contact Håkan Svedhem: <u>hsvedhem@esa.int</u>			
	March 16-20, 2015	46th Lunar and Planetary Science Conference			
	The Woodlands, TX, USA	http://www.hou.usra.edu/meetings/lpsc2015/			
New!	March 24-26, 2015 Moffett Field, CA, USA	Planetary Protection Knowledge Gaps for Human Extraterr. Missions Workshop http://www.hou.usra.edu/meetings/ppw2015/			
New!	March 31-April 2, 2015	NRC's Committee on Astrobiology and Planetary Science (CAPS)			
itew.	Washington DC, USA				
		Second Quarter, 2015			
Updated	April 7-8 2015 Hampton, VA, USA	Venus Instrument and Laboratory Measurements Workshop http://www.hou.usra.edu/meetings/venustech2015/			
	April 12-17, 2015	European Geosciences Union General Assembly 2015			
	Vienna, AUSTRIA	http://www.egu2015.eu/home.html			
	April 28-29, 2015	5th PCL Focus Days 2015			
	Wachtberg, GERMANY	http://workshops.fhr.fraunhofer.de/pclfocusdays/			
	May 4-6, 2015 Pasadena, CA, USA	Comparative Tectonics and Geodynamics of Venus, Earth, and Rocky Exoplanets http://www.hou.usra.edu/meetings/geodyn2015/			
		Humans to Mars Summit			
	May 5-7, 2015 Washington, DC, USA Humans to Mars Summit http://h2m.exploremars.org/				
	May 19-22, 2015	4th International Planetary Dunes Workshop			
	Boise, ID, USA	http://www.hou.usra.edu/meetings/dunes2015/			
	May 19-22, 2015 Laural, MD, USA	Workshop on Issues in Crater Studies and the Dating of Planetary Surfaces http://www.hou.usra.edu/meetings/craterstats2015/			
	May 26-27, 2015	iCubeSat 2015: 4th Interplanetary CubeSat Workshop			
	London, UK	http://iCubeSat.org			
New!	June 9-11, 2015	IIth IAA Low-Cost Planetary Mission Conference (LCPM-II)			
	Berlin, GERMANY	http://www.dlr.de/LCPM11			
	June 15-19, 2015	12th International Planetary Probe Workshop (IPPW-12)			
	Cologne, GERMANY June 15-19, 2015	http://www.planetaryprobe.eu/ Astrobiology Science Conference 2015 (Abscicon)			
	Chicago, IL, USA	http://www.hou.usra.edu/meetings/abscicon2015/			
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Third Quarter, 2015				
	July 27-31, 2015 Berkeley, CA, USA	Annual Meetings of the Meteoritical Society http://metsoc2015.ssl.berkeley.edu/		
New!	August 4-6, 2015 Pasadena, CA, USA	2nd Landing Site Workshop for the Mars 2020 Rover http://marsnext.jpl.nasa.gov/		
New!	August 16-21, 2015 Prague, CZ	Goldschmidt 2015 http://goldschmidt.info/2015/		
New!	September 16-17, 2015 Irvine, CA, USA	NRC's Committee on Astrobiology and Planetary Science (CAPS)		
	September 27-October 2, 2015 Nantes, FRANCE	European Planetary Science Congress http://www.epsc2015.eu/home.html		
		Fourth Quarter, 2015		
	November 1-4, 2015 Baltimore, MD, USA Geological Society of America Annual Meeting			
	November 8-13, 2015 National Harbor, MD, USA	47th Meeting of the American Astronomical Society Division for Planetary Sciences (DPS 2015)		
	November 9-13, 2015 Foz do Iguacu, BRAZIL	2nd Symposium of the Committee on Space Research (COSPAR 2015): Water and Life in the Universe		
	December 14-18, 2015 San Francisco, CA, USA	AGU Fall Meeting		

2016			
	January 7, 2016	20-Day ExoMars Launch Period Opens	
	March 4, 2016	20-Day Insight Launch Window Opens	
New!	March 29-31, 2016 Washington DC, USA	NRC's Committee on Astrobiology and Planetary Science (CAPS)	
	July 30-August 7, 2016 Istanbul, TURKEY	41st Scientific Assembly of the Committee on Space Research (COSPAR 2016) and Associated Events http://www.cospar-assembly.org	
	August 7-12, 2016 Berlin, GERMANY	Annual Meetings of the Meteoritical Society	
New!	September 14-15, 2016 Irvine, CA, USA	NRC's Committee on Astrobiology and Planetary Science (CAPS)	
	September 28, 2016	Insight Arrival at Mars	
	October 16-21, 2016 Pasadena, CA, USA	Joint DPS-EPSC Meeting	
	October 19, 2016	ExoMars Arrival at Mars	

Seasons on Mars				
	MY32	MY33	MY34	
Start of Northern Spring / $L_{\mbox{\tiny S}}$ 0	7/31/2013	6/18/2015	5/05/2017	
Start of Northern Summer / $L_{\mbox{\scriptsize s}}$ 90	2/15/2014	1/03/2016	11/20/2017	
Start of Northern Autumn / $L_{\rm s}$ 180	8/17/2014	7/04/2016	5/22/2018	
Start of Northern Winter / $L_{\rm s}$ 270	1/11/2015	11/28/2016	10/16/2018	

Special holidays to consider when scheduling conferences/workshops/meetings				
Good Friday	4/18/2014	4/3/2015	4/6/2016	4/14/2017
Rosh Hashanah	9/25/2014	9/14/2015	9/16/2016	9/20/2017
Yom Kippur	10/4/2014	9/23/2015	9/25/2016	9/29/2017
(Note that Jewish holidays start at sundown the previous evening)				
Thanksgiving Day, U.S.	11/27/2014	11/26/2015	11/22/2016	11/23/2017
Thanksgiving Day, Canada	10/13/2014	10/12/2015	10/8/2016	10/9/2017
Christmas Day	12/25/2014	12/25/2015	12/25/2016	12/25/2017

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

Carla de la Paz at paz@jpl.nasa.gov, 818-354-3160.

All announcements listed in this newsletter will be posted on the MEPAG website, available at:

http://mepag.jpl.nasa.gov