Mars Science News

First Circular posted for MEPAG Meeting 33
February 22-23, 2017 @ Monrovia, CA

Jeffrey Johnson, MEPAG Chair, cordially invites members of the Mars science and exploration communities, including our international colleagues, to attend the 2017 face-to-face meeting of the Mars Exploration Program Analysis Group (MEPAG), scheduled for February 22-23, 2017, at the Double-Tree Hotel in Monrovia, CA. The meeting will also be webcast for those who cannot attend in-person. The full first circular has been posted at http://mepag.nasa.gov/meetings.cfm?expand=m33 — additional information about the meeting, as it becomes available, will be posted there.

This meeting will report on the overall status of Mars exploration. A special topic for discussion will be the final report from the Mars International Collaboration Science Analysis Group (MIC-SAG, see 2nd page of this newsletter) summarizing their recommendations on how to coordinate U.S. and international science and payload participation in the next orbiter mission to Mars in a manner that ensures completion of mission science objectives.

Congratulations to the ExoMars Trace Gas Orbiter Project!
Here is ESA’s press release on the early (check-out) results of the Trace Gas Orbiter — their first observations from within Mars orbit: http://www.esa.int/Our_Activities/Space_Science/ExoMars/First_views_of_Mars_show_potential_for_ESA_s_new_orbiter.

Call for presentations issued for 3rd 2020 Mars Rover Landing Site Workshop
February 8-10, 2017 @ Monrovia, CA

The 3rd landing site workshop for the 2020 Mars Rover mission will be held at the Doubletree Hotel, Monrovia, CA, on February 8-10, 2017. Presentations are solicited on the science merits of the eight remaining candidate landing sites for the Mars 2020 mission. The full second announcement/call for presentations, workshop logistics, and a request for registration can be found at: http://marsnext.jpl.nasa.gov/workshops/wkshp_2017_02.cfm. Prior science presentations and information about how the 2020 engineering constraints relate to these eight (and other) candidate 2020 landing sites can be found at http://marsnext.jpl.nasa.gov.

The primary goal of the third workshop will be to further evaluate the eight candidate landing sites that emerged from the second workshop and reduce the number of candidate sites remaining under consideration to three or four. Presenters at the workshop are expected to make a comprehensive, persuasive talk on why a specific site is the right one for the 2020 mission and payload, including how and where the science objectives of the mission can be accomplished.

Persons wishing to make a presentation at the workshop should submit the title of their talk to John Grant and Matt Golombek by January 13, 2017. We request that persons planning to attend register by January 31, 2017 at https://docs.google.com/forms/d/e/1FAIpQLSdP6j2SOSiSvaptQQUtDgUVAuNT87VrWj9kagfdUyY2tUM8HqDQ/viewform, to aid with logistics.

A hotel block has been arranged at the workshop venue: DoubleTree by Hilton Hotel Monrovia - Pasadena Area, 924 West Huntington Drive, Monrovia, California, 91016, USA +1-626-357-1900. To book a room at $159/night (plus taxes and fees) during February 7-12, please call the hotel and reference the “JPL-MEPAG” meeting, or reserve a room via the link provided on the meeting webpage.
**Mars International Collaboration (MIC) SAG requests community input**

At MEPAG meeting 32, Jim Watzin, the Director for NASA’s Mars Exploration Program, requested that MEPAG convene a study to analyze and make recommendations regarding science team organization and operational models for the next Mars Orbiter. Thus, the Mars International Collaboration Science Analysis Group (MIC-SAG) was initiated and will provide a report outlining different models and the advantages/disadvantages of each. The MIC-SAG Terms of Reference and membership list are below.

As part of this effort, this group invites comments from Mars community members about their experiences within different science team models involving collaboration between a range of stakeholders -- including but not limited to experiences with multi-instrument, international, and/or commercial partners within science collection. To participate in this short survey, please visit [https://docs.google.com/forms/d/e/1FAIpQLSeAhNsNpTdjlWueePbNR1MpLjSPV5oK57ZYx10uagZtLiA8XLg/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeAhNsNpTdjlWueePbNR1MpLjSPV5oK57ZYx10uagZtLiA8XLg/viewform). Comments will be accepted until **January 15, 2017**, and can be provided anonymously.

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**Mars International Collaboration Science Analysis Group Terms of Reference**

*Accepted November 11, 2016*

The next orbiter mission to Mars may be extremely cost constrained and could be limited in the number of US instruments that can be selected.

**Goal** – To increase participation and coordination in contributed and selected instruments during design, development and operations of the next orbiter mission to Mars and, by doing so, to ensure that the science objectives will be met and that the international Mars science community will be maintained and enhanced.

The Mars International Collaboration Science Analysis Group (MIC-SAG) will consider the process of selection and the roles of science team members of an orbiter team to design, develop, integrate, and operate payload elements, the majority of which may be provided by international and/or commercial partners reducing significant costs to NASA.

The significant challenges that the study group will address include:

- How to organize an international team so that high-priority science is conducted to advance the goals of NASA and MEP, and be consistent with recommendations of the Decadal Survey, guided in part by the Next Mars Orbiter Science Analysis Group report (2015);
- How to craft opportunities for U.S. scientists while forming collaborations with international and commercial partners;
- How to select an effective science team that preserves the science integrity of the mission through design, development and mission operations, perhaps including phasing of its members;
- How to capture different modes of scientist participation to compare and contrast.

The MIC-SAG is requested to develop different models for scientists’ participation in the mission and delineate the pros and cons of the different approaches.

<table>
<thead>
<tr>
<th>MIC-SAG members</th>
<th>MIC-SAG ex-officio members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bruce Jakosky (Chair, CU/LASP)</td>
<td>Rich Zurek (Lead; MPO)</td>
</tr>
<tr>
<td>Jim Bell (ASU)</td>
<td>Don Hassler (SWRI)</td>
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<tr>
<td>Barbara Cohen (MSFC)</td>
<td>Alfred McEwen (UA/LPL)</td>
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<tr>
<td>Joy Crisp (JPL)</td>
<td>Kim Seelos (APL)</td>
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<tr>
<td>Frank Eparvier (LASP)</td>
<td>Roger Yelle (UA/LPL)</td>
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<td>Serina Diniega (MPO)</td>
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<tr>
<td>Jeffrey Johnson (MEPAG Chair)</td>
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<td>Michael Meyer (MEP Lead Scientist)</td>
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**3rd Planetary Data Workshop: June 12-25, 2017**

The 3rd Planetary Data Workshop will be held in Flagstaff, AZ to cover a range of planetary data topics, including mission data availability and tools, data access capabilities, data user training, GIS, planetary mapping, PDS data, services, and capabilities. Please submit an [Indication of Interest](https://forms.gle/2zW5RvM63Zw3d3yn8) by Friday, February 10, 2017, to receive reminders about this meeting.
Call for Papers: Icarus Special Issue on Mars polar research

The Scientific Organizing Committee of the Sixth International Conference on Mars Polar Science and Exploration is organizing a special issue of Icarus related to Mars Polar research. In recognition of the broad scope, interdisciplinary nature, and strong international interest in this topic, they welcome the participation of any interested scientist with relevant theoretical, experimental, or field experience. This special issue is open to all interested authors with Mars Polar related research to publish, whether they attended the conference or not. Please email questions or notices of intent to guest editors, Adrian Brown and Michael Sori.

Manuscripts should be submitted through Icarus’ EVISE website; Authors must select “Mars Polar Science VI” when they reach the “Article Type” step in the submission process. The paper submission deadline is February 1, 2017, with final publication of the Special Issue in Fall 2017.

Planetary Science Vision 2050 Workshop

February 27-March 1, 2017 @ NASA HQ, Washington DC
http://www.hou.usra.edu/meetings/V2050/

NASA’s Planetary Science Division (PSD) is planning a community workshop that is meant to provide PSD with a very long-range vision of what planetary science may look like in the future. The workshop will gather the leading experts in Solar System planetary science and related disciplines, together with experts in space technologies, to identify potential science goals and enabling technologies that can be implemented by the end of the 2040s and would support the next phase of Solar System exploration. Participation in this workshop will be space-limited and requires submission of an abstract. Abstracts are due December 9, 2016.

Near-term Due Dates (next three months)

<table>
<thead>
<tr>
<th>Due</th>
<th>Project</th>
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<tbody>
<tr>
<td>December 9</td>
<td>Planetary Science Vision 2050 Workshop, Abstract deadline</td>
</tr>
<tr>
<td>January 10</td>
<td>Lunar and Planetary Science Conference, Abstract deadline</td>
</tr>
<tr>
<td>January 11</td>
<td>European Geosciences Union General Assembly, Abstract deadline</td>
</tr>
<tr>
<td>January 13</td>
<td>3rd Mars 2020 Rover Landing Site Selection Workshop, Presentation Title deadline</td>
</tr>
<tr>
<td>January 18</td>
<td>AbSciCon, Abstract deadline</td>
</tr>
<tr>
<td>February 14</td>
<td>2017 GSA Cordilleran Section, Abstract deadline</td>
</tr>
</tbody>
</table>

Upcoming Conferences and Workshops

A note about “conferences” and this calendar of events:
- Missing NCTS#s (and forecasting deadline, if anomalous) can be sent to Meredith Cosby (Meredith.A.Cosby@jpl.nasa.gov).
- If no deadline is noted: it is usually 90 days in advance — sometimes further in advance if the conference is “Heavily Attended.”
- Please do not assume our noting of NCTS# is complete. If you are unsure if 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, 2016

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>December 5-6, 2016 Irvine, CA, USA</td>
<td>Academies’ Search for Life Workshop/A Workshop on Searching for Life Across Space and Time <a href="http://SearchingForLife.eventbrite.com">http://SearchingForLife.eventbrite.com</a>, For those unable to attend in person, the live workshop webcast will be available at: <a href="https://livestream.com/accounts/15221519/events/6098927">https://livestream.com/accounts/15221519/events/6098927</a></td>
</tr>
<tr>
<td>December 12-16, 2016 San Francisco, CA, USA</td>
<td>AGU Fall Meeting <a href="http://fallmeeting.agu.org/2016/">http://fallmeeting.agu.org/2016/</a>, NCTS# 25415-17</td>
</tr>
</tbody>
</table>
First Quarter, 2017

January 2-3, 2017
Grapevine, TX, USA
Exoplanets Exploration Program Analysis Group (ExoPAG) meeting
https://exoplanets.nasa.gov/exep/events/159/

January 11-13, 2017
Tucson, AZ, USA
16th Meeting of the NASA Small Bodies Assessment Group (SBAG)
http://www.lpi.usra.edu/sbag/ NCTS# 27699-17

January 11-13, 2017
Boulder, CO, USA
The Dust, Atmosphere and Plasma Environment of the Moon and Small Bodies Workshop
http://impact.colorado.edu/dap_meeting.html

January 17-20, 2017
Granada, SPAIN
Sixth International Workshop on the Mars Atmosphere: Modelling and Observations
http://www-mars.lmd.jussieu.fr/granada2017/, NCTS# 26193-17

New!
January 31—February 1, 2017
Kiruna, SWEDEN
Mars Express Science Working Team Meeting
Contact Dmitri Titov (dmitri.titov@esa.int)

February 8-10, 2017
Pasadena, CA, USA
Mars 2020 Rover Third Landing Site Workshop
http://marsnext.jpl.nasa.gov, NCTS# 26193-17

February 22-23, 2017
Monrovia, CA, USA
Mars Exploration Program Analysis Group (MEPAG) Meeting 33
http://mepag.jpl.nasa.gov/meetings.cfm

Updated!
February 22-23, 2017
Atlanta, GA, USA
Outer Planets Assessment Group (OPAG) Meeting
http://www.lpi.usra.edu/opag/ NCTS# 28089-17

February 27-March 1, 2017
Washington, DC, USA
Planetary Science Vision 2050 Workshop
http://www.hou.usra.edu/meetings/V2050/ NCTS# 28002-17

March 4-11, 2017
Big Sky, MT, USA
IEEE Aerospace Conference
https://www.aeroconf.org/, NCTS# 26165-17

March 20-24, 2017
The Woodlands, TX, USA
Lunar and Planetary Science Conference
http://www.hou.usra.edu/meetings/lpsc2017/, NCTS# 26280-17

March 28-30, 2017
Washington, DC, USA
NRC’s Committee on Astrobiology and Planetary Science (CAPS)

Second Quarter, 2017

New!
April 23—28, 2017
Vienna, AUSTRIA
European Geosciences Union General Assembly
http://www.egu2017.eu/ NCTS# 27025-17
PS8.2: Hyperspectral Data Measurements and Analysis to Support Planetary Exploration

April 24-27, 2017
Phoenix, AZ, USA
Astrobiology Science Conference
http://www.hou.usra.edu/meetings/abscicon2017/, NCTS# 27507-17

May 15-19, 2017
Boulder, CO, USA
International Conference on Mars Aeronomy
http://lasp.colorado.edu/meetings/marsaeronomy2017/index.php, NCTS# 26278-17

May 16-19, 2017
St. George, UT, USA
Fifth International Planetary Dunes Workshop
http://www.hou.usra.edu/meetings/dunes2017/
### Second Quarter, 2017—cont.

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>May 23—25, 2017</td>
<td>Honolulu, HI, USA</td>
<td><strong>New!</strong> 2017 GSA Cordilleran Section</td>
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<td><a href="https://www.geosociety.org/GSA/Sections/cd/2017mtg/home.aspx">https://www.geosociety.org/GSA/Sections/cd/2017mtg/home.aspx</a></td>
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<tr>
<td></td>
<td></td>
<td>T16 New Developments in the Geology and Geochemistry of Mars, T17 Volcanism Across the Solar System, T18 Deposition and Diagenesis of Volcaniclastic Sediments on Earth and Mars, T19 Mars On Earth: Understanding Mars Through Earth Surface Processes</td>
</tr>
<tr>
<td>May 30-31, 2017</td>
<td>Cambridge, UK</td>
<td><strong>Updated! 6th Interplanetary CubeSat Workshop</strong></td>
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<td><a href="https://icubesat.org">https://icubesat.org</a> NCTS# 27834-17</td>
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<tr>
<td>June 13-15, 2017</td>
<td>Greenbelt, MD, USA</td>
<td>17th Meeting of the NASA Small Bodies Assessment Group</td>
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<tr>
<td>June 12-16, 2017</td>
<td>The Hague, Netherlands</td>
<td>14th International Planetary Probe Workshop (IPPW-14)</td>
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### Third-Fourth Quarter, 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>July 13-15, 2017</td>
<td>Houston, TX, USA</td>
<td><strong>Updated! Dust in the Atmosphere of Mars and Its Impact on the Human Exploration of Mars</strong></td>
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<tr>
<td></td>
<td></td>
<td><a href="http://www.hou.usra.edu/meetings/marsdust2017/">http://www.hou.usra.edu/meetings/marsdust2017/</a> NCTS#28194-17</td>
</tr>
<tr>
<td>July 24-27, 2017</td>
<td>Santa Fe, NM, USA</td>
<td><strong>Meteoritical Society Meeting</strong></td>
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<td><a href="http://meteoriticalsociety.org/?page_id=18">http://meteoriticalsociety.org/?page_id=18</a></td>
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<tr>
<td>August 22—25, 2017</td>
<td>Houston, TX, USA</td>
<td><strong>New! Accretion: Building New Worlds</strong></td>
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<td><a href="http://www.hou.usra.edu/meetings/accretion2017/">http://www.hou.usra.edu/meetings/accretion2017/</a></td>
</tr>
<tr>
<td>September 13-14, 2017</td>
<td>Washington, DC, USA</td>
<td><strong>New! NRC’s Committee on Astrobiology and Planetary Science (CAPS)</strong></td>
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<td><a href="http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events">http://sites.nationalacademies.org/SSB/SSB_067577#Meetings_and_Events</a></td>
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<tr>
<td>September 25—29, 2017</td>
<td>Adelaide, AUSTRALIA</td>
<td><strong>New! 68th International Astronautical Congress</strong></td>
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<tr>
<td>December 11-15, 2017</td>
<td>New Orleans, LA, USA</td>
<td><strong>New! American Geophysical Union Fall Meeting (AGU)</strong></td>
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### Seasons on Mars

<table>
<thead>
<tr>
<th>Season</th>
<th>MY34</th>
<th>MY35</th>
<th>MY36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of Northern Spring / L, 0</td>
<td>5/05/2017</td>
<td>3/23/2019</td>
<td>2/07/2021</td>
</tr>
<tr>
<td>Start of Northern Summer / L, 90</td>
<td>11/20/2017</td>
<td>10/08/2019</td>
<td>8/25/2021</td>
</tr>
<tr>
<td>Start of Northern Autumn / L, 180</td>
<td>5/22/2018</td>
<td>4/08/2020</td>
<td>2/24/2022</td>
</tr>
<tr>
<td>Start of Northern Winter / L, 270</td>
<td>10/16/2018</td>
<td>9/02/2020</td>
<td>7/21/2022</td>
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Special holidays to consider when scheduling conferences/workshops/meetings

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<tbody>
<tr>
<td>Good Friday</td>
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<tr>
<td>Rosh Hashanah</td>
<td>10/03/2016</td>
<td>9/21/2017</td>
<td>9/10/2018</td>
<td>9/30/2019</td>
</tr>
<tr>
<td>Yom Kippur</td>
<td>10/12/2016</td>
<td>9/30/2017</td>
<td>9/19/2018</td>
<td>10/09/2019</td>
</tr>
</tbody>
</table>

(Note that Jewish holidays start at sundown the previous evening)

Thanksgiving Day, Canada

10/10/2016 10/09/2017 10/08/2018 10/14/2019

Thanksgiving Day, U.S.


Christmas Day


Please send your Mars Community Announcements and calendar items for inclusion in next month’s newsletter to: Meredith Cosby at Meredith.A.Cosby@jpl.nasa.gov.

This newsletter (and all previous months’) is also posted on the MEPAG website: http://mepag.jpl.nasa.gov

- 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@jpl.nasa.gov.
- To be added to this list and receive this monthly newsletter and other Mars Science announcements, or to update your MEP-AG directory information (which contains the email list used for sending out this newsletter), please fill out the online form: http://goo.gl/forms/WilmhP1M9V (also linked on the MEPAG website http://mepag.nasa.gov, under Updates).