

## Program



To access the abstracts, use the hand tool of your Acrobat Reader to click on the name of any session.

After the full program listing for that session appears, click on the title of a presentation to view the abstract for that presentation.

**ORAL SESSIONS****Monday Morning, March 19, 8:30 a.m.**

Waterway Ballroom 1	M101	<a href="#">Celebrating Cassini I</a>
Waterway Ballroom 4	M102	<a href="#">Planetary Volatiles: It's Not All About the Water</a>
Waterway Ballroom 5	M103	<a href="#">Mars Downslope Mass Movement I: RSLs, Gullies, and Landslides</a>
Waterway Ballroom 6	M104	<a href="#">Astrobiology I: Looking for Life on Mars, Microbial Impact of Human Exploration, Curation Contamination Measurements</a>
Montgomery Ballroom	M105	<a href="#">Protoplanetary Disks I: Dynamics and Reservoirs</a>

**Monday Afternoon, March 19, 1:30 p.m.**

Waterway Ballroom 4 and 5	M150	<a href="#">Plenary Session: Masursky Lecture and Award Presentations</a>
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**Monday Afternoon, March 19, 2:30 p.m.**

Waterway Ballroom 1	M151	<a href="#">Mars Atmosphere</a>
Waterway Ballroom 4	M152	<a href="#">Differentiated Meteorites I: A Playlist of Parent Bodies</a>
Waterway Ballroom 5	M153	<a href="#">Improved Science Through the Implementation of a Planetary Spatial Data Infrastructure I</a>
Waterway Ballroom 6	M154	<a href="#">Presolar, Interplanetary, and Cometary Dust</a>
Montgomery Ballroom	M155	<a href="#">Mars Polar Caps Where Ice Lingers</a>

**Monday Afternoon, March 19, 5:30 p.m.**

Waterway Ballroom 4 and 5	NASA Headquarters Briefing <i>immediately followed by Opening of Exhibits in the Town Center Exhibit Hall</i>	
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**Tuesday Morning, March 20, 8:30 a.m.**

Waterway Ballroom 1	T201	<a href="#">Early Mars Surface Processes I: Valley Networks, Oceans(?), and the Hydrologic Cycle</a>
Waterway Ballroom 4	T202	<a href="#">Asteroids I: NEAs, PHAs, and MBAs, Oh My!</a>
Waterway Ballroom 5	T203	<a href="#">Titan is Terrific</a>
Waterway Ballroom 6	T204	<a href="#">Improving Understanding of Lunar Chronology: The Key to Time</a>
Montgomery Ballroom	T205	<a href="#">Chondrites and Their Components I: Nebular Processes</a>

**Tuesday Afternoon, March 20, 1:30 p.m.**

Waterway Ballroom 1	T251	<a href="#">Early Mars Surface Processes II: Alluvial Fans and Paleolakes</a>
<i>followed at 3:00 p.m. by</i>		
Waterway Ballroom 1	T252	<a href="#">Aqueous Alteration on Mars I: Results from Rovers, Meteorites, and Analogs</a>
Waterway Ballroom 4	T253	<a href="#">Ceres: Seriously a New Dawn</a>
Waterway Ballroom 5	T254	<a href="#">21st Century Venus I: Atmosphere to Interior</a>
Waterway Ballroom 6	T255	<a href="#">Origin and Igneous Evolution of the Moon</a>
Montgomery Ballroom	T256	<a href="#">Impacts I: Planetary Impact Cratering</a>

**Wednesday Morning, March 21, 8:20 a.m.**

Waterway Ballroom 6	W404	<a href="#">Taurus-Littrow Valley I: 45 Years After Apollo 17</a>
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**Wednesday Morning, March 21, 8:30 a.m.**

Waterway Ballroom 1	W401	<a href="#">Mineralogy of Mars from Orbital Data I: Wet or Dry, Hot or Cold, Habitable or Not?</a>
Waterway Ballroom 4	W402	<a href="#">Tectonics and Interior Dynamics: Crunchy Outside, Chewy Inside</a>
Waterway Ballroom 5	W403	<a href="#">Aeolian Geology II: The Answer is Blowin' in the Wind</a>
Montgomery Ballroom	W405	<a href="#">Protoplanetary Disks II: Mass Immigration</a>
<i>followed at 10:15 a.m. by</i>		
Montgomery Ballroom	W406	<a href="#">Chondrites and Their Components II: Metals and Organics</a>

**Wednesday Afternoon, March 21, 1:30 p.m.**

Waterway Ballroom 1	W451	<a href="#">Aqueous Alteration on Mars II: Results from Rovers, Meteorites, and Analogs</a>
Waterway Ballroom 4	W452	<a href="#">Space Weathering is Ruining Perfectly Good Planetary Surfaces Across the Solar System</a>
Waterway Ballroom 5	W453	<a href="#">Planetary Volcanism I: Fire and Fury in the Solar System</a>
<i>followed at 3:00 p.m. by</i>		
Waterway Ballroom 5	W454	<a href="#">Iron Cores and More</a>
Waterway Ballroom 6	W455	<a href="#">Taurus-Littrow Valley II: 45 Years After Apollo 17</a>
Montgomery Ballroom	W456	<a href="#">Chondrites and Their Components III: Parent Body Processes</a>

**Thursday Morning, March 22, 8:30 a.m.**

Waterway Ballroom 1	R501	<a href="#">Volatiles On and Around the Moon</a>
Waterway Ballroom 4	R502	<a href="#">Geologic History from Curiosity Observations at Gale Crater</a>
Waterway Ballroom 5	R503	<a href="#">Mercury: First Among Planets I</a>
Waterway Ballroom 6	R504	<a href="#">Impacts II: Modeling</a>
Montgomery Ballroom	R505	<a href="#">Groovy Galilean Satellites</a>

**Thursday Afternoon, March 22, 1:30 p.m.**

Waterway Ballroom 1	R551	<a href="#">Lunar Volcanism I</a>
Waterway Ballroom 4	R552	<a href="#">Mars Rover Results I: Depositional and Environmental History</a>
Waterway Ballroom 5	R553	<a href="#">Astrobiology II: Life Detection, Origins of Life, Prebiotic Chemistry</a>
<i>followed at 3:45 p.m. by</i>		
Waterway Ballroom 5	R554	<a href="#">Phobos and Deimos I</a>
Waterway Ballroom 6	R555	<a href="#">Impacts III: Shock Metamorphism and Experiments</a>
Montgomery Ballroom	R556	<a href="#">Pleasant Pluto I</a>
<i>followed at 3:15 p.m. by</i>		
Montgomery Ballroom	R557	<a href="#">Incredible Icy Satellites</a>

**Friday Morning, March 23, 8:30 a.m.**

Waterway Ballroom 1	F701	<a href="#">Lunar Geophysics: Gravity, Tectonics, and Magnetism All Swirled Together</a>
Waterway Ballroom 4	F702	<a href="#">Martian Geochemistry, Petrology, and Chronology I</a>
Waterway Ballroom 5	F703	<a href="#">Comets and Asteroids: Properties, Processes, 67P, and Stardust</a>
Waterway Ballroom 6	F704	<a href="#">Dreams of a Glacial Mars</a>
Montgomery Ballroom	F705	<a href="#">Impacts IV: Terrestrial Impact Cratering</a>

**POSTER SESSIONS****Tuesday Evening, March 20, 6:00 p.m.**

Town Center Exhibit Area		POSTER SESSION I
T301	<a href="#">Celebrating Cassini II</a>	T325 <a href="#">Asteroids II: Near, Far, Wherever They Are</a>
T302	<a href="#">Tempting Titan</a>	T326 <a href="#">Ceres and Vesta: Features, Composition, and Evolution</a>
T303	<a href="#">Dragonfly New Frontiers Mission Finalist</a>	T327 <a href="#">Differentiated Meteorites II: All the Achondrites (Except the HEDs)</a>
T304	<a href="#">CAESAR New Frontiers Mission Finalist</a>	T328 <a href="#">Differentiated Meteorites III: HEDs</a>
T305	<a href="#">Astrobiology III: Analog Environments, Life Detection, and Extremophiles</a>	T329 <a href="#">Chondrites and Their Components IV</a>
T306	<a href="#">Astrobiology IV: Search for Life on Mars</a>	T330 <a href="#">Protoplanetary Disks III</a>
T307	<a href="#">Mars 2020 SuperCam Calibration and Lab Results</a>	T331 <a href="#">Presolar Grains</a>
T308	<a href="#">MSL and MER Results: Geochemistry and Mineralogy</a>	T332 <a href="#">Interplanetary and Cometary Dust</a>
T309	<a href="#">Amorphous Materials on Mars</a>	T333 <a href="#">Genesis: Latest Results</a>
T310	<a href="#">Mars Valley Networks, Lakes, and More: There's Water on Mars??</a>	T334 <a href="#">Improved Science Through the Implementation of a Planetary Spatial Data Infrastructure II: Products</a>
T311	<a href="#">Mars Downslope Mass Movement II: RSLs, Gullies, and Landslides</a>	T335 <a href="#">Improved Science Through the Implementation of a Planetary Spatial Data Infrastructure III: Services</a>
T312	<a href="#">Mars Geologic Mapping and New Data Analysis Techniques</a>	T336 <a href="#">Topics in STEM Education</a>
T313	<a href="#">21st Century Venus II: Atmosphere to Interior</a>	T337 <a href="#">Planetary Science Deep Space Studies (PSDS3) SmallSat Concepts</a>
T314	<a href="#">Exoplanets</a>	T338 <a href="#">Planetary Mission Concepts I: Small Bodies and Solar System</a>
T315	<a href="#">Mars and Exoplanet Atmospheres</a>	T339 <a href="#">Planetary Mission and Instrument Concepts: Venus</a>
T316	<a href="#">Aeolian Geology I: The Answer is Blowin' in the Wind</a>	T340 <a href="#">Lunar Landing Site Characterization</a>
T317	<a href="#">Environmental Analogs I: Aeolian Processes</a>	T341 <a href="#">Planetary Mission Concepts II: Moon</a>
T318	<a href="#">Environmental Analogs II: Water and Ice Processes</a>	T342 <a href="#">Planetary Mission Concepts III: Mars</a>
T319	<a href="#">Environmental Analogs III: Training and Facilities</a>	T343 <a href="#">Missions to Small Bodies: Ongoing and Upcoming</a>
T320	<a href="#">Environmental Analogs IV: Volcanic Processes</a>	T344 <a href="#">Planetary Mission Concepts IV: Outer Planets</a>
T321	<a href="#">Planetary Volcanism and Igneous Processes: Endless Lava</a>	T345 <a href="#">Planetary Mission Concepts V: SmallSats</a>
T322	<a href="#">Lunar Remote Sensing: Look but Don't Touch!</a>	T346 <a href="#">Community Update from Mars Exploration Program Analysis Group</a>
T323	<a href="#">Lunar Petrology and Geochemistry</a>	
T324	<a href="#">Lunar Chronology and Cratering</a>	

**Thursday Evening, March 22, 6:00 p.m.**

Town Center Exhibit Area

POSTER SESSION II

R601	<a href="#">Mercury: First Among Planets II</a>	R624	<a href="#">Astrobiology V: Big Picture, Origin of Life, Prebiotic Chemistry</a>
R602	<a href="#">Space Weathering: Why Some Bodies Have Atmosphere Envy</a>	R625	<a href="#">Astrobiology VI: Icy Worlds, Isotopes, and Plants</a>
R603	<a href="#">Small Bodies Laboratory Work</a>	R626	<a href="#">Mars Future Exploration and Landing Sites</a>
R604	<a href="#">Differentiated Meteorites IV: Planetary Differentiation, Irons, and Pallasites</a>	R627	<a href="#">Field Work and Instrument Testing for Analog Planetary Science</a>
R605	<a href="#">Chondrites and Their Components V</a>	R628	<a href="#">Human Extra Vehicular Activity (EVA) Research</a>
R606	<a href="#">Comets: Composition, Evolution, and Dynamics</a>	R629	<a href="#">Material Analogs I: General Laboratory Analyses</a>
R607	<a href="#">Topics in Advanced Curation</a>	R630	<a href="#">Material Analogs II: Planetary Simulants</a>
R608	<a href="#">Impacts V: Planetary Impact Cratering</a>	R631	<a href="#">Material Analogs III: Mars</a>
R609	<a href="#">Impacts VI: Modeling</a>	R632	<a href="#">Aqueous Alteration on Mars III: From Terrestrial Analogs and Martian Meteorites</a>
R610	<a href="#">Impacts VII: Shock Metamorphism and Experiments</a>	R633	<a href="#">Mineralogy of Mars from Orbital Data II: Wet or Dry, Hot or Cold, Habitable or Not?</a>
R611	<a href="#">Impacts VIII: Terrestrial Impact Cratering</a>	R634	<a href="#">Martian Geochemistry, Petrology, and Chronology II</a>
R612	<a href="#">Impact of Meteorites on the Terrestrial Record</a>	R635	<a href="#">Redox Reactions and Salts on Mars: Analogs and Experiments</a>
R613	<a href="#">Planetary Volcanism II: Fire, Ice, and Fragmentation</a>	R636	<a href="#">Mars Rover Results II: Depositional and Environmental History</a>
R614	<a href="#">Planetary Tectonics and Interior Dynamics</a>	R637	<a href="#">Martian Stratigraphy and Structure</a>
R615	<a href="#">Lunar Geophysics: Gravity, Tectonics, and Magnetism</a>	R638	<a href="#">Mars Ice and Polar Processes</a>
R616	<a href="#">Lunar Volcanism II</a>	R639	<a href="#">Mars Crater Morphology</a>
R617	<a href="#">Lunar Exterior Volatiles</a>	R640	<a href="#">Phobos and Deimos II</a>
R618	<a href="#">Lunar Mapping and Global Map Products</a>	R641	<a href="#">Icy Satellites</a>
R619	<a href="#">Lunar Mission Data</a>	R642	<a href="#">Pleasant Pluto II</a>
R620	<a href="#">Instrument and Payload Concepts I: Cameras and Imagery</a>	R643	<a href="#">Public Engagement</a>
R621	<a href="#">Instrument and Payload Concepts II: Spectroscopy</a>	R646	<a href="#">Community Update from Mars Exploration Program Analysis Group</a>
R622	<a href="#">Instrument and Payload Concepts III: Radar, Seismology, Gravimetry, and XRD</a>		
R623	<a href="#">Instrument and Payload Concepts IV: Astrobiology</a>		

**PRINT ONLY**

801	<a href="#">Advances in Analytical Techniques</a>	813	<a href="#">Jupiter/Ganymede</a>
802	<a href="#">Astrobiology</a>	814	<a href="#">Mars Geochemistry and Petrology</a>
803	<a href="#">Cassini</a>	815	<a href="#">Martian Geomorphology</a>
804	<a href="#">Chondrites and Their Components</a>	816	<a href="#">Outer Planets</a>
805	<a href="#">Differentiated Meteorites</a>	817	<a href="#">Planetary Mission Concepts</a>
806	<a href="#">Education and Public Engagement</a>	818	<a href="#">Planetary Spatial Data Infrastructure</a>
807	<a href="#">Environmental and Material Analogs</a>	819	<a href="#">Planetary Volcanism</a>
808	<a href="#">General Moon</a>	820	<a href="#">Pluto</a>
809	<a href="#">Impact of Meteorites on the Terrestrial Record</a>	821	<a href="#">Presolar Grains</a>
810	<a href="#">Impacts</a>	822	<a href="#">Protoplanetary Disks</a>
811	<a href="#">Inner Solar System</a>	823	<a href="#">Small Bodies</a>
812	<a href="#">Instrument and Payload Concepts</a>		