

# Overview 8M-S<sup>3</sup> Program

## The Eighth Moscow Solar System Symposium (8M-S<sup>3</sup>)

IKI RAS, 9-13 October 2017

	9 October	10 October	11 October	12 October	13 October			
10.00	<b>Opening</b>							
10.20								
10.40								
11.00								
11.20								
11.40	<b>Session 1. Planetary atmospheres</b>	<b>Session 2. Lunar and planetary geology</b>	<b>Session 3. Giant planets</b>	<b>Session 6. Dust and dusty plasma</b>	<b>Session 9. Instruments, Missions, Exploration</b>			
						Coffee	Coffee	Coffee
12.00								
12.20								
12.40				Lunch		Lunch	Lunch	Lunch
13.00								
14.00								
14.20								
14.40								
15.00								
15.20								
15.40								
16.00	Coffee	Coffee	Coffee	Coffee	Coffee			
16.20								
16.40								
17.00								
17.20								
17.40								
18.00	<b>Poster Session</b>	Social events in Moscow	<b>Poster Session</b>	Concert	Social events in Moscow			
18.20								
18.40			Welcome party					
19.00								
19.20								
19.40								
20.00								

## 8M-S<sup>3</sup> Scientific Program

**Monday, 9 October 2017**

Lev Zelenyi                      Opening Remarks                      10.00-10.40

**Session 1. PLANETARY ATMOSPHERES. THE SESSION DEDICATED TO THE MEMORY OF TOBIAS OWEN**                      **10.40-18.00**

**Conveners: Ludmila ZASOVA, Scott BOLTON, Oleg KORABLEV**

**8MS3-PA-01**                      Mikhail Marov and Sergei Ipatov                      Heterogeneous accretion: some results of the computer modeling                      10.40-11.00

**8MS3-PA-02**                      Jonathan Lunine and Scott Bolton                      The origin of Titan's atmosphere revealed in isotopic and molecular composition: from Toby Owen's pioneering work to the end of Cassini                      11.00-11.20

**8MS3-PA-03**                      Jack Waite et al                      CASSINI In Situ Observations of Saturn's Equatorial Atmosphere and Ionosphere                      11.20-11.40

**Coffee-break**                      11.40-12.00

**8MS3-PA-04**                      Helmut Lammer et al                      Element fractionation by hydrodynamic escape at early Venus: constraining the planet's evolution                      12.00-12.20

**8MS3-PA-05**                      Mikhail Gerasimov                      On the Origin of Atmospheres of Terrestrial Planets                      12.20-12.40

**8MS3-PA-06**                      Yeon Joo Lee et al                      Venus' glory observed by the UV Imager on board Akatsuki                      12.40-13.00

**Lunch**                      13.00-14.00

**8MS3-PA-07**                      Vladimir Krasnopolsky                      Disulfur dioxide and its NUV absorption in the photochemical model of Venus atmosphere                      14.00-14.20

**8MS3-PA-08**                      Vladimir Krasnopolsky and Denis Belyaev                      Search for HBr and bromine photochemistry on Venus                      14.20-14.40

**8MS3-PA-09**                      Mikhail Luginin et al                      Study of scale heights and detached haze layers at high latitudes in the upper haze of Venus from SPICAV IR data                      14.40-15.00

**8MS3-PA-10**                      Jose Luis Vazquez Poletti et al                      Optimal Cloud Computing Infrastructure for Planetary Image Processing: A Tale of Two Planets (Mars and Venus)                      15.00-15.20

**8MS3-PA-11**                      Anatoliy Pavlov et al                      Evolution of Martian atmosphere in modern era, its isotopic imprints and connection with Martian subsurface environments                      15.20-15.40

**8MS3-PA-12**                      Ashley Palumbo et al                      Late Noachian icy highlands climate model: Exploring the possibility of transient melting and fluvial/lacustrine activity through peak annual/seasonal temperatures                      15.40-16.00

**Coffee-break**                      16.00-16.20

**8MS3-PA-13**                      Anna Fedorova et al                      Long-term observations of water vapor in the middle atmosphere of Mars by SPICAM/MEX                      16.20-16.40

**8MS3-PA-14**                      Vladimir Krasnopolsky                      Annual mean mixing ratios of N<sub>2</sub>, Ar, O<sub>2</sub>, and CO in the martian atmosphere                      16.40-17.00

**8MS3-PA-15**                      Maxim Litvak                      Inter-annual variations of Martian seasonal caps from neutron spectroscopy observations onboard Mars Odyssey                      17.00-17.20

**8MS3-PA-16**                      Salvador Jiménez et al                      Magnetic field at Mars ionosphere from MARSIS data. Models and simulations                      17.20-17.40

**8MS3-PA-17**                      Valery Shematovich                      Neutral escape at Mars induced by the high-energy H/H<sup>+</sup> of solar wind origin                      17.40-18.00

**POSTER SESSION (all sessions)**                      **18.00-19.00**

**Tuesday, 10 October 2017**

**Session 2. LUNAR AND PLANETARY GEOLOGY**

**10.00-18.00**

**Conveners: Igor MITROFANOV, Maxim LITVAK**

<b>8MS3-PG-01</b>	Maxim Litvak et al	Crater age and hydrogen content in lunar regolith from LEND neutron data	10.00-10.20
<b>8MS3-PG-02</b>	Alexander Bazilevsky et al	Recent tectonic deformation in the South pole area of the Moon	10.20-10.40
<b>8MS3-PG-03</b>	Andrew Dmitrovsky et al	Preliminary data on the age interval of the Mons Rumker volcanic province formation	10.40-11.00
<b>8MS3-PG-04</b>	Arne Grumpe et al	Daytime-dependent variations of the lunar surficial OH/H <sub>2</sub> O content	11.00-11.20
<b>8MS3-PG-05</b>	Daniela Rommel et al	South Pole-Aitken Basin: Anorthosite rich material as indicator for a complex layering of the basin crust structure	11.20-11.40

**Coffee-break**

**11.40-12.00**

<b>8MS3-PG-06</b>	Mariya Buchenkova et al	Wave phenomena in the Moon environment	12.00-12.20
<b>8MS3-PG-07</b>	Audrey Vorburger et al	The Moon observed in Energetic Neutral Atoms: Review of the Scientific Findings from SARA/CENA on board Chandrayaan-1	12.20-12.40
<b>8MS3-PG-08</b>	Anton Sanin et al	Potentially interesting landing sites around the South pole of the Moon	12.40-13.00

**Lunch**

**13.00-14.00**

<b>8MS3-PG-09</b>	Carle Pieters et al	Diversity of materials at Luna 24 site from Moon Mineralogy Mapper (M3)	14.00-14.20
<b>8MS3-PG-10</b>	Anastasia Zharkova et al	Craters features of the Moon and Mercury Southern polar regions	14.20-14.40
<b>8MS3-PG-11</b>	Ariel Deutsch et al	New evidence for surface ice in micro-cold traps and in three large craters at the North polar region on Mercury: implications for lunar exploration	14.40-15.00
<b>8MS3-PG-12</b>	Ekaterina Feoktistova et al	Thermal and illumination conditions in the radar features host craters in the Mercury's South pole region	15.00-15.20
<b>8MS3-PG-13</b>	Svetlana Pugacheva et al	Morphological features of Mercury South pole relief	15.20-15.40
<b>8MS3-PG-14</b>	James Head et al	Deciphering the Noachian geological and climate history of Mars: Part 2- A Noachian stratigraphic view of major geologic processes and their climatic consequences	15.40-16.00

**Coffee-break**

**16.00-16.20**

<b>8MS3-PG-15</b>	Denis Lisov et al	Water and Chlorine abundance in the Gale crater according to DAN data	16.20-16.40
<b>8MS3-PG-16</b>	Benjamin Boatwright and James Head	MARSSIM Landform Evolution Model: Hydrologic Constraints on the Noachian Early Dry Period	16.40-17.00
<b>8MS3-PG-17</b>	James Head	Venus Geological History: Current Perspectives, Unknowns, and Opportunities for the Modeling Community	17.00-17.20
<b>8MS3-PG-18</b>	Evgeniya Guseva	Rift zones of Venus: Possible terrestrial analogues	17.20-17.40
<b>8MS3-PG-19</b>	Piero D'Incecco and L.S.Glaze	Imdr Regio as the landing site of the Venera-D mission: a geologic perspective	17.40-18.00

**Wednesday, 11 October 2017**

**Session 3. GIANT PLANETS**

**10.00-14.40**

**Conveners: Valery SHEMATOVICH, Scott BOLTON**

<b>8MS3-GP-01</b>	Scott Bolton et al	The Juno Mission	10.00-10.20
<b>8MS3-GP-02</b>	John Connerney et al	Jupiter's Magnetic Field and Magnetosphere: Juno's First Eight Orbits	10.20-10.40
<b>8MS3-GP-03</b>	John Joergensen et al	Profiling the Jovian high energy particle flux at Juno's trajectories	10.40-11.00
<b>8MS3-GP-04</b>	Victor Kronrod	Fragmentation of planetesimals and capture of material by the circumplanetary disks of Jupiter and Saturn	11.00-11.20
<b>8MS3-GP-05</b>	Igor Alexeev et al	Equatorial Current Disk Dynamics in the Jovian Magnetosphere	11.20-11.40

**Coffee-break**

**11.40-12.00**

<b>8MS3-GP-06</b>	Peter Wurz et al	Interaction of Jupiter's Plasma with the Galilean Moons	12.00-12.20
<b>8MS3-GP-07</b>	Yaroslav Ilyushin and Paul Hartogh	The Prospects for Active and Passive Radar Probing of Ganymede	12.20-12.40
<b>8MS3-GP-08</b>	Valery Shematovich	Gas Envelopes of the Icy Moons with Oceans	12.40-13.00

**Lunch**

**13.00-14.00**

<b>8MS3-GP-09</b>	Jonathan Lunine and Scott Bolton	Using Volatiles to Determine Planetary Formation Processes	14.00-14.20
<b>8MS3-GP-10</b>	Alexander Hayes et al	The Bathymetry and Composition of Titan's Lakes and Seas: A Post-Cassini View	14.20-14.40

**Session 4. ASTROBIOLOGY, METHODS AND INSTRUMENTS FOR SEARCH OF EXTRATERRESTRIAL LIFE**

**14.40-16.00**

**Convener: Elena VOROBYOVA**

<b>8MS3-AB-01</b>	Konstantin Luchnikov et al	Method and Laser Ablation Mass-Spectrometer for the Search of Evidence of Life From the Europa Lander	14.40-15.00
<b>8MS3-AB-02</b>	Maxim Zaitsev and Mikhail Gerasimov	Formation of Amino Acids from Components of a Nitrogen-Methane Atmosphere during Hypervelocity Impacts	15.00-15.15
<b>8MS3-AB-03</b>	Leonid Ksanfomality	Moving Living Objects on Venus: New Evidence	15.15-15.30
<b>8MS3-AB-04</b>	Dmitrij Skladnev and V.V. Sorokin	Observation of biogenic nanoparticles generation for comparison of microbial communities and for detection of extraterrestrial life	15.30-15.45
<b>8MS3-AB-05</b>	Oleg Kotsyurbenko	Astrobiology in Russia: Integration to the Worldwide Astrobiology	15.45-16.00

**Coffee-break**

**16.00-16.20**

**Session 5. EXOPLANETS**

**16.20-18.00**

**Convener: Alexander TAVROV**

<b>8MS3-EP-01</b>	Jean-Loup Bertaux	A Road Map to the New Frontier: finding Extra Terrestrial Intelligenc	16.20-16.40
<b>8MS3-EP-02</b>	Ildar Shaikhislamov et al	Modeling Transit Observations of HD209458B	16.40-17.00
<b>8MS3-EP-03</b>	Jean-Loup Bertaux et al	Retrieving the true mass distribution of exoplanets detected with the Radial velocity method: method and first results	17.00-17.15

<b>8MS3-EP-04</b>	Vladislava Ananjeva et al	Retrieving the true mass distribution of exoplanets detected with the Radial velocity method: removing the effect of observing selection	17.15-17.30
<b>8MS3-EP-05</b>	Seyed Javad Jafarzadeh et al	The effect of unknown parameters of exoplanets on their habitability	17.30-17.45
<b>8MS3-EP-06</b>	Alexander Tavrov et al	Stellar imaging coronagraph and exoplanet coronal spectrometer –instruments for exoplanet exploration onboard the WSO-UV	17.45-18.00

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**POSTER SESSION (all sessions)**

**18.00-19.00**

**Thursday, 12 October 2017**

**Session 6. DUST AND DUSTY PLASMA IN SPACE**

**10.00-11.40**

**Convener: Alexander ZAKHAROV**

<b>8MS3-DP-01</b>	Maria Pilar Velasco et al	Atmospheric dust dynamics: fractional models, numerical methods and computational simulations	10.00-10.20
<b>8MS3-DP-02</b>	Dariia Betsis et al	Martian dust cycle via solar infrared occultation observations by SPICAM IR for 27–34 MY	10.20-10.40
<b>8MS3-DP-03</b>	Evgenij Zubko et al	Reflectance of lunar dust: Concept of experiment aboard a lunar lander	10.40-11.00
<b>8MS3-DP-04</b>	Sergey Popel et al	Dusty plasma cloud in the lunar exosphere and impacts of meteoroids	11.00-11.20
<b>8MS3-DP-05</b>	Andrey Dubinsky and Sergey Popel	Hydrogen formation in lunar regolith and its possible influence on dusty plasma at the Moon	11.20-11.40

**Coffee-break**

**11.40-12.00**

**Session 7. SMALL BODIES**

**12.00-16.00**

**Convener: Alexander BASILEVSKY**

<b>8MS3-SB-01</b>	Olga Popova et al	Infrasound registration of Romanian superbolide	12.00-12.15
<b>8MS3-SB-02</b>	Anna Kartashova et al	The investigation of meteor events by multi technique observations	12.15-12.30
<b>8MS3-SB-03</b>	Rob Landis et al	The Recovery of 2012 TC4 and the International Asteroid Warning Network (IAWN)	12.30-12.45
<b>8MS3-SB-04</b>	Ilan Roth	Anomalous Mg-26 composition in the early solar system chondrites	12.45-13.00

**Lunch**

**13.00-14.00**

<b>8MS3-SB-05</b>	Boris Kondratyev et al	Dynamics and evolution of rings around Centaurs Chariklo and Chiron	14.00-14.15
<b>8MS3-SB-06</b>	Sergey Voropaev	The surface tension of small bodies under self-gravity, rotation and tidal forces	14.15-14.30
<b>8MS3-SB-07</b>	Anastasiia Dubovitskaia et al	Update of shape parameters and libration amplitude for Saturnian satellites Dione and Rhea	14.30-14.45
<b>8MS3-SB-08</b>	Rosine Lallement and Jean-Loup Bertaux	Diffuse Interstellar Bands carriers and cometary organic material	14.45-15.00
<b>8MS3-SB-09</b>	Olena Shubina et al	Color-slope interpretation of comet C/2013 UQ4 (Catalina) using the model of agglomerated debris particles	15.00-15.15
<b>8MS3-SB-10</b>	Vacheslav Emel'yanenko	Nongravitational effects in the motion of near-Sun comets	15.15-15.30
<b>8MS3-SB-11</b>	Yuri Skorov	The models of cometary gas production: Analysis for 67P/Churyumov-Gerasimenko	15.30-15.45
<b>8MS3-SB-12</b>	Ksanfomality Leonid	Comets 1P/Halley and 67P/Churyumov-Gerasimenko: comparison of some their properties	15.45-16.00

**Coffee-break**

**16.00-16.20**

**Session 8. SOLAR WIND INTERACTIONS WITH PLANETS AND SMALL BODIES**

**Convener: Oleg VAISBERG**

**16.20-18.00**

<b>8MS3-SW-01</b>	Mingyuan Wang et al	Exploring obvious lunar ionosphere based on the service module of circumlunar return and reentry spacecraft	16.20-16.30
<b>8MS3-SW-02</b>	Alexey Berezhnoy and G.V. Belov	Behavior of hydrogen during impact events on the Moon	16.30-16.40
<b>8MS3-SW-03</b>	Sergey Shuvalov et al	Analysis of solar wind-Mars interaction region and pick-up ions from MAVEN measurements	16.40-16.50
<b>8MS3-SW-04</b>	Oleg Vaisberg et al	Dayside magnetosphere of Mars	16.50-17.00
<b>8MS3-SW-05</b>	Vladimir Ermakov et al	Initial analysis of ion fluxes in magnetotail of Mars based on simultaneous measurements on Mars Express and MAVEN	17.00-17.10

<b>8MS3-SW-06</b>	Eduard Dubinin et al	How to describe the martian space environment and how solar wind and EUV control ion escape. MAVEN observations	17.10-17.20
<b>8MS3-SW-07</b>	Petra Odert et al	Escape of volatiles from Mars-sized planetary embryos	17.20-17.30
<b>8MS3-SW-08</b>	Mikhail Verigin and Galina Kotova	Who twists venusian magnetotail?	17.30-17.40
<b>8MS3-SW-09</b>	Oleg Vaisberg et al	Radio-occultation and in-situ measurements of plasma density in Halley's comet plasma	17.40-17.50
	Discussion		17.50-18.00

**Friday, 13 October 2017**

**Session 9. INSTRUMENTS, MISSIONS, EXPLORATION**

**10.00-18.20**

**Convener: Oleg KORABLEV**

<b>8MS3-IM-01</b>	Thomas Duxbury et al	Restoration of the 1969 Mariner Mars Images: Phase I Results	10.00-10.20
<b>8MS3-IM-02</b>	Thomas Duxbury et al	The International Phobos / Deimos Surface Characterization and Site Selection Working Group	10.20-10.40
<b>8MS3-IM-03</b>	Jürgen Oberst et al	DEPHINE – the Deimos and Phobos Interior Explorer – a Mission Proposal to ESA'S Cosmic Vision Program/ <b>invited talk/</b>	10.40-11.00
<b>8MS3-IM-04</b>	Dmitrij Titov et al	Mars Express science highlights and future plans <b>/invited talk/</b>	11.00-11.20
<b>8MS3-IM-05</b>	Sergei Nikiforov et al	Water content in the Martian subsurface along the NASA/MSL “Curiosity” Rover traverse: data of the DAN instrument in Passive mode	11.20-11.40
<b>Coffee-break</b>			11.40-12.00
<b>8MS3-IM-06</b>	Jordanka Semkova et al	Charged particles radiation quantities onboard Exomars Trace Gas Orbiter during the transit and in high elliptic Mars orbit	12.00-12.20
<b>8MS3-IM-07</b>	Alexey Malakhov et al	Fine Resolution Neutron Detector (FREND) Instrument onboard Exomars 2016 TGO Orbiter. First Results	12.20-12.40
<b>8MS3-IM-08</b>	Andrey Vostrukhin	Neutron component of radiation environment for interplanetary missions	12.40-13.00
<b>Lunch</b>			13.00-14.00
<b>8MS3-IM-09</b>	Ludmila Zasova et al	VENERA-D - Concept Mission to Venus: Scientific Goals and Architecture <b>/invited talk/</b>	14.00-14.20
<b>8MS3-IM-10</b>	Maxim Litvak et al	Active gamma ray spectrometer proposed for future Venus surface missions	14.20-14.40
<b>8MS3-IM-11</b>	Daniel Rodionov et al	ExoMars 2020 Surface platform Payload/ <b>invited talk/</b>	14.40-15.00
<b>8MS3-IM-12</b>	Francesca Esposito et al	Characterisation of Dust Suspended in the Atmosphere of Mars: the Dust Suite - Micromed Sensor for the Exomars 2020 Mission	15.00-15.20
<b>8MS3-IM-13</b>	Diego Rodríguez Díaz et al	AMR instrument for stationary magnetic measurements on Mars	15.20-15.40
<b>8MS3-IM-14</b>	Marina Díaz-Michelena et al	NEWTON Project: New opportunities for magnetic surveys in the planetary exploration	15.40-16.00
<b>Coffee-break</b>			16.00-16.20
<b>8MS3-IM-15</b>	Jinsong Ping	Low frequency radio astronomical missions on the farside space of the Moon	16.20-16.40
<b>8MS3-IM-16</b>	Mariia Zakharova	Compiling the navigational 3D model for prospective lunar base area	16.40-17.00
<b>8MS3-IM-17</b>	Alexander Kosov et al	Radioscience Experiments for Martian and Lunar Missions	17.00-17.20
<b>8MS3-IM-18</b>	Dmitry Moiseenko et al	Functional tests of ARIES-L instrument	17.20-17.40
<b>8MS3-IM-19</b>	Victor Apestigue et al	Mars 2020 Radiation and Dust Sensor Technical Overview	17.40-18.00
<b>8MS3-IM-20</b>	Ryan Chau and A.A. Mardon	Lunar Caving: Usage and Exploration	18.00-18.20



## Poster Session

9 October 18.00-19.00

11 October 18.00-19.00

### PLANETARY ATMOSPHERES

8MS3-PS-01	Sanjay S. Limaye et al	Mesoscale vortex circulations on Venus observed in AKATSUKI IR2 images
8MS3-PS-02	Daria Evdokimova et al	Venus cloud parameters modulating the 1.28- $\mu$ m nightside window emission observed by SPICAV IR/VEX
8MS3-PS-03	Elena Petrova	Glory on the upper cloud deck of Venus and identification of the unknown UV absorber
8MS3-PS-04	Vladimir Gubenko et al	Radio occultation retrievals of zonal wind speed at the high-latitude atmosphere of the Venus
8MS3-PS-05	A. Pavelyev et al	Space bistatic radio-holography as applied to study atmosphere and surface of Venus and Earth
8MS3-PS-06	Ashley Palumbo and James Head	The mineralogic alteration history of early Mars: The role of large craters and basins in transient regional high-temperature alteration
8MS3-PS-07	Anton Sanin et al	Impact of the Martian atmosphere properties on the spatial resolution of the FREND/TGO
8MS3-PS-08	Herbert Lichtenegger et al	Influence of Suprathermal Atoms on the Escape and Evolution of the Martian' CO <sub>2</sub> Atmosphere

### LUNAR AND PLANETARY GEOLOGY

8MS3-PS-09	James Head and H. Quintal	McMurdo Dry Valleys: Exploring Antarctica As A Mars Analog
8MS3-PS-10	Adeene Denton and James Head	The fretted terrain, Mars: Implications of missing volume for hypotheses of origin
8MS3-PS-11	James Cassanelli and James Head	Outflow Channels on Mars: Testing the Origin of Reull Vallis in Hesperia Planum by Large-Scale Lava-Ice Interactions and Top-Down Melting
8MS3-PS-12	Erica Jawin et al	The Prinz-Harbinger Shield Volcano: A Transition in Lunar Volcanic Eruption Style
8MS3-PS-13	Boris Ivanov	Small lunar crater degradation: time scale and mechanisms
8MS3-PS-14	Natalia Kozlova et al	Morphometric catalogue of lunar craters 1-10 km in diameter
8MS3-PS-15	Dijun Guo et al	Orientele Secondary Craters: Insights Into Orientele Impact Parameters and the Largest Secondary Crater Size of the South Pole-Aitken Basin Event
8MS3-PS-16	Gennady Kochemasov	Global Degassing Producing Formation In Crust of Hydrocarbon Concentrations, Kimberlites, and Alkaline Rocks
8MS3-PS-17	Gennady Kochemasov	Orbital Energy As a Main Source for Shaping and Structuring Cosmic Bodies
8MS3-PS-18	Tamara Gudkova et al	On attenuation of torsional oscillations on Mars
8MS3-PS-19	Vladimir Zharkov et al	On the estimate of the dissipative factor of martian interiors
8MS3-PS-20	Alexey Batov et al	Model stresses in martian interiors for two-level loading
8MS3-PS-21	Evgeny Slyuta	The Scientific Tasks of the LUNA-GRUNT Project (LUNA-28)

<b>8MS3-PS-22</b>	Sergey Krasilnikov et al	Estimation of probability of dangerous slopes in the landing sites of LUNA-GLOB spacecraft through analysis of shadow area on the LROC NAC images
<b>8MS3-PS-23</b>	Alexey Malakhov et al	SAP “Luna” system for automated scientific planning of future lunar missions
<b>8MS3-PS-24</b>	Mikhail Ivanov et al	Sources of materials at the three high-priority landing sites of the LUNA-GLOB mission
<b>8MS3-PS-25</b>	Maya Djachkova et al	LUNA-25 landing sites candidates: detailed analysis
<b>8MS3-PS-26</b>	Mikhail Ivanov et al	Contribution of the lunar basin ejecta to materials within the LUNA-GLOB landing zone
<b>8MS3-PS-27</b>	Yuqi Qian et al	Geology of the CHANG’E-5 Candidate Landing Region In Northern Procellarum
<b>8MS3-PS-28</b>	Yangxiaoyi Lu and Vladislav Shevchenko	Crater Von Karman:CHANG’E-4 Farside Landing Mission
<b>8MS3-PS-29</b>	Alexander Gusev et al	Spin-orbital evolution and interior of the Moon: past, modern, future
<b>8MS3-PS-30</b>	Ekaterina Kronrod et al	Lunar internal structure models consistent with seismic and selenodetic (GRAIL and LLR) data and thermodynamic constraints
<b>8MS3-PS-31</b>	Azary Barenbaum and Michael Shpekin	Problem of mascons origin
<b>8MS3-PS-32</b>	Andrey Kharitonov	The analysis of magnetic and gravity field of the Moon from satellite data for the geological analysis of lunar rocks
<b>8MS3-PS-33</b>	Nadezhda Chujkova et al	A spherical harmonic and statistical analysis of the surface topography of the Moon and the connection of the relief with gravitational field
<b>8MS3-PS-34</b>	Arthur Zagidullin et al	Results of modeling the rotation of the Moon on the basis of modern theories of its physical libration
<b>8MS3-PS-35</b>	Alexey Andreev	Analysis of planetophysical parameters on the basis of harmonic and fractal methods and space missions data
<b>8MS3-PS-36</b>	Sergei Ipatov	Formation and growth of embryos of the Earth-Moon system
<b>8MS3-PS-37</b>	Nikita Demidov and Mikhail Ivanov	Validation of Diviner rock abundance data with direct rock counting on LROC images
<b>8MS3-PS-38</b>	Anastasia Zharkova	Mercury topographic roughness: calculation, analysis, mapping

## GIANT PLANETS

<b>8MS3-PS-39</b>	Anna Dunaeva et al	Main constraints on the hydrous silicates content for the models of partially differentiated Titan
<b>8MS3-PS-40</b>	Sergei Kulikov and Alexander Skalsky	Magnetic field measurements around Ganymede and at its surface
<b>8MS3-PS-41</b>	Victor Tejfel et al	Zonal-time variations of the ammonia absorption on Jupiter in 2005-2015

8MS3-PS-42 Ivan Pensionerov et al Is Saturn's magnetosphere open to the interplanetary magnetic field?

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8MS3-PS-44 Georgi Managadze Emergence of life in the meteorite impact plasma in the process of the formation and mass accumulation by the Earth

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