

# Overview 6M-S<sup>3</sup> Program

## The Sixth Moscow Solar System Symposium (6M-S<sup>3</sup>)

IKI RAS, 5-9 October 2015

	5 October	6 October	7 October	8 October	9 October	
10.00	Opening	Session 2. Giant planets and their moons	Session 4. Dust and dusty plasma in space	Session 6. Mars	Session 7. New projects and experiments	
10.20						
10.40						
11.00						
11.20						
11.40	Coffee	Coffee	Coffee	Coffee	Coffee	
12.00						
12.20						
12.40						
13.00	Lunch	Lunch	Lunch	Lunch	Lunch	
14.00	Session 1. Moon	Session 3. Solar System Small Bodies	Session 5. Venus	Session 6. Mars	Session 7. New projects and experiments	
14.20						
14.40						
15.00						
15.20						
15.40						
16.00	Coffee	Coffee	Coffee	Coffee		
16.20						
16.40						
17.00						
17.20						
17.40						
18.00		Social events in Moscow	Poster Session	Richter Foundation Concert		
18.20						
18.40						
19.00	Poster Session Welcome Party	Social events in Moscow	Social events in Moscow	Symposium Reception		
19.20						
19.40						
20.00						

## 6M-S<sup>3</sup> Scientific Program

**5 October 2015**

**Session 1: Moon**

**10.00-19.00**

**Convener: Igor Mitrofanov**

<b>6MS3-MN-01</b>	James Head and L.Wilson	Generation, Ascent and Eruption of Magma on the Moon: New Insights Into Source Depths, Magma Supply, Intrusions and Effusive/Explosive Eruptions	10.00-10.20
<b>6MS3-MN-02</b>	Mikhail Kreslavsky et al	Morphometric peculiarities of small impact craters in the lunar polar areas	10.20-10.40
<b>6MS3-MN-03</b>	Gennady Kochemasov	Coupling principal tectonic features of some planets and their satellites: Earth-Moon, Mars-Phobos, Pluto-Charon	10.40-11.00
<b>6MS3-MN-04</b>	Natalia Kozlova et al	Revision of estimates of absolute age of small lunar craters (quantitative analysis of crater morphology for determination of their degree of degradation)	11.00-11.20
<b>6MS3-MN-05</b>	Dmitri Skulachev	Grain-to-Grain Contacts and Lunar Regolith Thermal Conductivity	11.20-11.40
<b>Coffee-break</b>			11.40-12.00
<b>6MS3-MN-06</b>	Ekaterina Kronrod et al	Temperature distribution and uranium content in the lunar crust and in the lunar mantle	12.00-12.20
<b>6MS3-MN-07</b>	Svetlana Pugacheva and Vladislav Shevchenko	Morphology of the Moon areas with anomalously high content of thorium	12.20-12.40
<b>6MS3-MN-08</b>	Alexander Basilevsky et al	Geologic characteristics of the Lunokhod 1 and Yutu rover landing sites, NW Mare Imbrium of the Moon	12.40-13.00
<b>Lunch</b>			13.00-14.00
<b>6MS3-MN-09</b>	Carle Pieters and James Head	M3's Top-Ten Target Issues [in the next phase of exploration]	14.00-14.20
<b>6MS3-MN-10</b>	Anton Sanin on behalf of LEND team	Water maps of the polar Moon: LEND data after 6 years on the lunar orbit	14.20-14.40
<b>6MS3-MN-11</b>	James Fastook and James Head	Cold-based Glaciation on Mercury: Accumulation and Flow of Ice in Permanently Shadowed Circum-Polar Crater Interiors	14.40-15.00
<b>6MS3-MN-12</b>	Ariel Deutsch et al	Mapping areas of shadow in Mercury's north polar region to constrain the extent of stable thermal environments for ice deposits	15.00-15.20
<b>6MS3-MN-13</b>	Maxim Litvak	Volatiles in Lunar Polar Regolith	15.20-15.40
<b>6MS3-MN-14</b>	Ross Potter and James Head	Basin formation on Mercury and the Moon - the same or different? Insights from numerical modeling	15.40-16.00
<b>Coffee-break</b>			16.00-16.20
<b>6MS3-MN-15</b>	Vladislav Tretyakov	Lunar robotic missions, as precursors for manned lunar flights	16.20-16.40

<b>6MS3-MN-16</b>	Simone Dell'Agnello et al	New Generation Laser Retroreflectors for the Moon, Mars, Phobos and Deimos	16.40-17.00
<b>6MS3-MN-17</b>	Alexander Gusev et al	Dynamics of the inner solid and outer liquid cores of the Moon for ChangE-4/5, Luna-25/26, ILOM projects	17.00-17.20
<b>6MS3-MN-18</b>	Lukas Hofer et al	Development of the gas chromatograph – mass spectrometer to investigate volatile species in the lunar soil for the Luna-Resurs mission	17.20-17.40
<b>6MS3-MN-19</b>	Alexey Berezhnoy et al	Properties of crater Boguslawski in application to planned Lunar Infrared Spectrometer (LIS) measurements	17.40-18.00
<b>6MS3-MN-20</b>	Vladimir Gromov and Alexander Kosov	The Objectives of the Radioscience Experiment in Luna-Resource and Luna-Glob Space Projects	18.00-18.20
<b>6MS3-MN-21</b>	Berengere Houdou on behalf of Roscosmos/ESA cooperation	Perspectives and plans of ESA/Roscosmos cooperation on robotic lunar missions	18.20-18.40
<b>6MS3-MN-22</b>	Igor Mitrofanov	Moon is our seventh continent: will it ever be inhabited?	18.40-19.00
<b>Poster Session (all sessions)</b>			<b>19.00-20.00</b>

**6 October 2015**

**Session 2: Giant Planets and their moons**

**10.00-11.40**

**Convener: Mikhail Ivanov**

<b>6MS3-GP-01</b>	Anna Dunaeva et al	Physical and thermal constraints on the models of partially differentiated Titan	10.00-10.20
<b>6MS3-GP-02</b>	Mikhail Podzolkov et al	Radiation hazard for different scenarios of space missions to Jupiter's moons	10.20-10.40
<b>6MS3-GP-03</b>	Alex Ekonomov et al	Scientific ballooning on Jupiter and other outer planets	10.40-11.00
<b>6MS3-GP-04</b>	Sergey Bulat et al	Life in the subglacial Antarctic Lake Vostok: First Results with Borehole-Frozen Lake Water	11.00-11.20
<b>6MS3-GP-05</b>	Vera Dorofeeva	Studies of comets and problems of cosmochemistry	11.20-11.40

**Coffee-break**

**11.40-12.00**

**Session 3. Solar System Small Bodies**

**12.00-17.40**

**Convener: Mikhail Ivanov**

<b>6MS3-SB-01</b>	Alexander Bazilevskiy et al	NavCam observations of the nucleus of comet 67P/Churyumov-Gerasimenko	12.00-12.20
<b>6MS3-SB-02</b>	Oleksandr Potashko and Shnyukov E.	Geology irregularities of the comet 67P	12.20-12.40
<b>6MS3-SB-03</b>	Leonid Ksanfomality et al	On comparison of the nuclei of comets 67P/CG and 1P/Halley	12.40-13.00
<b>Lunch</b>			<b>13.00-14.00</b>
<b>6MS3-SB-04</b>	Yuri Skorov et al	Cometary dust within the near-nucleus environment. Application to 67P/Churyumov-Gerasimenko	14.00-14.20
<b>6MS3-SB-05</b>	Peter Wurz et al	Volatiles in the Coma of comet Churyumov-Gerasimenko	14.20-14.40
<b>6MS3-SB-06</b>	Vladimir Busarev et al	Spectral signs of cometary activity on primitive asteroids (145) Adeona, (704) Interamnia, (779) Nina, and (1474) Beira	14.40-15.00
<b>6MS3-SB-07</b>	Evgenij Zubko et al	Characteristics of dust in Comet C/1995 O1 (Hale-Bopp) inferred with polarimetry	15.00-15.20
<b>6MS3-SB-08</b>	Vacheslav Emel'yanenko	Asteroids near the Sun	15.20-15.40
<b>6MS3-SB-09</b>	Vladislav Sidorenko et al	Rotational Dynamics of Cometary Nuclei and Related Physics	15.40-16.00

**Coffee-break**

**16.00-16.20**

<b>6MS3-SB-10</b>	Sergei Ipatov	Origin of orbits of secondaries in discovered trans-Neptunian binaries	16.20-16.40
<b>6MS3-SB-11</b>	Anton Ermakov et al	Constraints on Ceres' internal structure from the Dawn shape and gravity data	16.40-17.00
<b>6MS3-SB-12</b>	Sergey Voropaev	Ceres Structure and some Tips for the Study of gravitational Potential by the Dawn Mission	17.00-17.20
<b>6MS3-SB-13</b>	Gennady Kochemasov	Principles of the wave planetology manifesting in the Pluto-Charon system, Ceres, and the Moon	17.20-17.40

**7 October 2015**

**Session 4: Dust and dusty plasma in space**

**10.00-13.00**

**Convener: Alexander Zakharov**

<b>6MS3-DP-01</b>	Andrey Rusol and Mikhail Marov	Gas-Dust Protoplanetary Disc: Modeling Primordial Dusty Clusters Evolution	10.00-10.25
<b>6MS3-DP-02</b>	Vladislav Izmodenov et al	Modeling of the interstellar dust in the interplanetary medium	10.25-10.50
<b>6MS3-DP-03</b>	Tamas Gombosi et al	Negatively Charged Nano-grains at 67P/Churyumov-Gerasimenko	10.50-11.15
<b>6MS3-DP-04</b>	Alexey Berezhnoy and Borovička J.	Molecular bands in the spectra of the Benešov bolide	11.15-11.40
<b>Coffee-break</b>			11.40-12.00
<b>6MS3-DP-05</b>	Yangxiaoyi Lu and Vladislav Shevchenko	Study lunar soil and dust with Chang'E-3 mission data	12.00-12.20
<b>6MS3-DP-06</b>	Sergey Popel , Barbara Atamaniuk , Lev Zelenyi	Electric fields and dust particle rise near the lunar terminator	12.20-12.40
<b>6MS3-DP-07</b>	Sergey Popel et al	Meteoroid impacts and dust particle release from the lunar surface	12.40-13.00

**Lunch**

**13.00-14.00**

**Session 5: Venus**

**14:00-18:00**

**Convener: Ludmila Zasova**

<b>6MS3- VN -01</b>	Håkan Svedhem	Eight and a half years at Venus - The successes of Venus Express, / <i>invited talk</i> /	14.00-14.20
<b>6MS3- VN -02</b>	Vladimir Krasnopolsky	Modeling of Chemical Composition in the Venus Lower and Middle Atmospheres, / <i>invited talk</i> /	14.20-14.40
<b>6MS3- VN -03</b>	Denis Belyaev et al	Chemistry of Venus' mesosphere as measured by SPICAV/SOIR on-board Venus Express	14.40-15.00
<b>6MS3- VN -04</b>	Ludmila Zasova et al	Influence of the surface topography in Venus atmosphere	15.00-15.20
<b>6MS3- VN -05</b>	Sanjay S. Limaye	Some Questions About Venus Atmosphere	15.20-15.40
<b>6MS3- VN -06</b>	Nikolay Ignatiev et al	Upper cloud haze on the night side of Venus	15.40-16.00
<b>Coffee-break</b>			16.00-16.20
<b>6MS3- VN -07</b>	Alexander Basilevsky et al	Past and present volcanism of Venus, / <i>invited talk</i> /	16.20-16.40
<b>6MS3- VN -08</b>	Mikhail Ivanov and James Head	Venus: Main regimes of resurfacing	16.40-17.00
<b>6MS3- VN -09</b>	Evgeniya Guseva	The rift zones of Venus: rift valleys and belts of graben	17.00-17.20
<b>6MS3- VN -10</b>	Michael Bondarenko and Anatoly Gavrik	On Non-Meteoritic Origin of Layers below V1 in Venusian Ionosphere	17.20-17.40

**Discussion**

**17.40-18.00**

**Poster Session  
(all sessions)**

**18.00-19.00**

**8 October 2015**

**Session 6: Mars**

**10.00-18.00**

**Convener: Oleg Korablev**

**Session 6.1 Mars surface and geology**

**Conveners: James Head, Oleg Korablev**

**10.00-11.30**

<b>6MS3-MS-01</b>	Thomas Duxbury et al	Resurrecting the Mariner 1969 images of Mars using the MOLA global digital terrain model and modern computer techniques	10.00-10.15
<b>6MS3-MS-02</b>	James Head	Lyot Crater, Mars: Major Amazonian-Age Impact and the Nature of Ejecta Emplacement, Ejecta Deposit Characteristics and Modification	10.15-10.30
<b>6MS3-MS-03</b>	Violaine Sautter et al	Mafic and felsic igneous rocks at Gale crater: a ChemCam study	10.30-10.45
<b>6MS3-MS-04</b>	Maxim Litvak on behalf of DAN science team	DAN continues active neutron sensing on Mars: recent results from Curiosity	10.45-11.00
<b>6MS3-MS-05</b>	Ashley Horan and James Head	Impact Cratering as a Cause for Rainfall Producing Valley Networks on Mars: Predictions and Tests of the Hypothesis	11.00-11.15
<b>6MS3-MS-06</b>	Dmitry Golovin on behalf of DAN science team	Unusual spot on the crater Gale: DAN requests Curiosity to make U-turn	11.15-11.30

**Session 6.2 Terrestrial analogs**

**11.30-12.45**

**Conveners: James Head, Jessica Flahaut**

<b>6MS3-MS-07</b>	Alexander Kozyrev on behalf of DAN team	Field tests for Mars exploration in the Yakutia	11.30-11.45
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**Coffee-break**

**11.45-12.00**

<b>6MS3-MS-08</b>	Marina Diaz Michelena and Kilian R.	Magnetic on ground surveys on the orogenic crust of the Patagonian Andes. Implication for planetary exploration	12.00-12.15
<b>6MS3-MS-09</b>	Nikita Demidov and Lukin V.V.	Lessons learned in Antarctica for international exploration of Moon and Mars	12.15-12.30
<b>6MS3-MS-10</b>	Jessica Flahaut et al	Combined VNIR and Raman spectroscopy of Mars analogue sediments from the Atacama salt flats	12.30-12.45

**Session 6.3 Early climate and escape**

**12.45-15.15**

**Convener: Eduard Dubinin**

<b>6MS3-MS-11</b>	James Dickson et al	Formation of Gullies on Mars by Water at High Obliquity: Quantitative Integration of Global Climate Models and Gully Distribution	12.45-13.00
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**Lunch**

**13.00-14.00**

<b>6MS3-MS-12</b>	Ashley Horan and James Head	The Faint Young Sun Paradox: What It Means for Earth and Mars	14.00-14.15
<b>6MS3-MS-13</b>	Vladimir Krasnopolsky	Variations of the HDO/H <sub>2</sub> O Ratio in the Martian Atmosphere and Loss of Water from Mars	14.15-14.30
<b>6MS3-MS-14</b>	Anna Fedorova et al	Water vapor in the middle atmosphere of Mars during the global dust storm in 2007	14.30-14.45
<b>6MS3-MS-15</b>	Valery Shematovich	Neutral escape induced by the precipitation of high-energy protons and hydrogen atoms of the solar wind origin into the Martian atmosphere	14.45-15.00
<b>6MS3-MS-16</b>	Oleg Vaisberg	Mars atmospheric losses induced by the solar wind: comparison of observations with models	15.00-15.15

**Session 6.4 Missions and Results**

**15.15-18.00**

**Conveners: Dmitrij Titov, Hakan Svedhem**

<b>6MS3-MS-17</b>	Dmitrij Titov et al	Recent science highlights of the Mars Express mission	15.15-15.35
<b>6MS3-MS-18</b>	Eduard Dubinin and M. Fraenz	Ionosphere of Mars as seen by Mars Express	15.35-15.50
<b>6MS3-MS-19</b>	Brigitte Gondet and Jean-Pierre Bibring	Mesospheric CO <sub>2</sub> clouds at Mars: 7 Martian years survey by OMEGA/MEX	15.50-16.05
<b>Coffee-break</b>			16.05-16.30
<b>6MS3-MS-20</b>	Alexey Pankine	Variability of water vapor in the Martian atmosphere in MY26-30 from PFS/LW observations	16.30-16.45
<b>6MS3-MS-21</b>	Svetlana Guslyakova et al	Long-term nadir observations of the O <sub>2</sub> dayglow by SPICAM IR	16.45-17.00
<b>6MS3-MS-22</b>	Hakan Svedhem et al	ExoMars Mission	17.00-17.30
<b>6MS3-MS-23</b>	Pascal Rosenblatt and Marty J.C.	Using radio-navigation data of ESA's Trace Gas Orbiter (TGO) to improve the Mars' gravity seasonal variations	17.30-17.45
	<b>Discussion</b>		17.45-18.00

**9 October 2015**

**Session 7: New Projects and experiments**

**10.00-15.30**

**Convener: Oleg Korablev**

**Session 7.1 Laboratory investigations and Astrobiology**

**Convener: Mikhail Gerasimov**

<b>6MS3-NP-1</b>	Christof Janssen et al	Spectroscopic and Mass Spectrometric Studies on Ozone - Implications for Ozone Formation and the Origin of the Oxygen Isotopic Heterogeneity in the Solar System	10.00-10.15
<b>6MS3-NP-2</b>	Dmitry Skladnev et al	Nanobiotechnology for detection of extraterrestrial life	10.15-10.30
<b>6MS3-NP-3</b>	Vladimir Sorokin et al	Phages as markers for extraterrestrial life	10.30-10.45
<b>6MS3-NP-4</b>	Georgi Managadze et al	Space Factors Providing the Conditions for Abiotic Origin of the Living Matter	10.45-11.00
<b>6MS3-NP-5</b>	Konstantin Luchnikov et al	A Novel Technique and Mass-Spectrometric Instrument for Extraterrestrial Microbial Life Detection via Analyses of the Elemental Composition of Martian Regolith and Permafrost/Ice Samples	11.00-11.15
<b>6MS3-NP-6</b>	Georgi Managadze	Aerobiology research on Mars and the possibility of its implementation	11.15-11.30
<b>6MS3-NP-7</b>	Rongqiao He et al	Martian magnetic field: deserve to be concerned before heading to Mars	11.30-11.45

**Coffee-break**

**11.45-12.00**

**Session 7.2 Missions and Instruments**

**Convener: Hakan Svedhem**

<b>6MS3-NP-8</b>	Yafeng Guan et al	Gas Chromatograph for On-site Analysis of Organics on Mars	12.00-12.20
<b>6MS3-NP-9</b>	Andrey Fedorov	Scientific Goals and Instruments design of the Solar Orbiter Plasma Package	12.20-12.40
<b>6MS3-NP-10</b>	Daniel Rodionov, Jorge Vago et al	ExoMars 2018 Surface platform science investigations	12.40-13.00
<b>Lunch</b>			<b>13.00-14.00</b>
<b>6MS3- NP-11</b>	Marina Diaz Michelena	MAG-TRACE Instrument for Exomars'18 for extended capabilities in the planetary magnetic exploration	14.00-14.15
<b>6MS3- NP-12</b>	Francesca Esposito et al	MICROMED: a compact dust detector for Martian airborne dust investigation	14.15-14.30
<b>6MS3- NP-13</b>	Greg Koynash et al	The Wind Sensor of MeteoStation for ExoMars project	14.30-14.45
<b>6MS3- NP-14</b>	Imant Vinogradov et al	Adaptation of tunable diode laser absorption spectroscopy for in situ planetary studies. Application for planned missions to Moon, Mars and Venus	14.45-15.00
<b>6MS3- NP-15</b>	Alexei Shapkin et al	Development of a mast or robotic arm-mounted infrared AOTF spectrometer for surface Moon and Mars probes	15.00-15.15
<b>6MS3- NP-16</b>	Andrey Garov et al	Planetary data archive: new approach to data access, exploration and collaborative research	15.15-15.30

## Poster Session

5 October 19.00-20.00

7 October 18.00-19.00

Moon		
6MS3-PS-01	Anton Sanin et al	Short list of landing sites at Lunar poles
6MS3-PS-02	Dmitry Golovin	Testing facility for nuclear planetology in Dubna
6MS3-PS-03	Erica Jawin et al	Examining Spectral Variations in Lunar Localized Dark Mantle Deposits
6MS3-PS-04	Le Qiao et al	Young Lunar Mare Basalts: Definition and Analysis of their Characteristics, Distribution, Mode of Emplacement and Origin
6MS3-PS-05	Lauren Jozwiak et al	The Effect of Evolving Gas Distribution on Shallow Lunar Magmatic Intrusion Density: Implications for Gravity Anomalies
6MS3-PS-06	Mikhail Ivanov and James Head	Contribution of lunar basins to materials in the Luna-Glob perspective landing sites
6MS3-PS-07	Natalia Bulatova	Three-dimensional spatio-temporal technology
6MS3-PS-08	Alexander Shirenin	The concept is considered in relation to the establishment of high-precision selenodetic coordinate system during the mission “Luna-Glob, Luna-Resource”
6MS3-PS-09	Alexandre Skalsky et al	The wave phenomena resulted from the solar wind-Moon interaction
6MS3-PS-10	Natalia Kozlova et al	PRoViDE: Planetary Robotics Vision Data Exploitation based on lunar archive panoramic image processing
6MS3-PS-11	Mikhail Sinitsyn	The distribution of epithermal neutron flux in impact basins over the equatorial lunar surface
6MS3-PS-12	Albert Abdrakhimov et al	Crater Boguslawsky: Slope hazard estimation by shadow area measurement
6MS3-PS-13	Alexey Berezhnoy et al	Search for impact-produced optical flashes at the Moon along the terminator
6MS3-PS-14	Jianguo Yan et al	Lunar mascons high resolution density structure investigation using GRAIL gravity data
6MS3-PS-15	Alexander Kosov et al	New Features of Radio Science Experiments in Russian “Luna-Glob” and “Luna-Resource” Programs
6MS3-PS-16	Sergey Pavlov et al	Evaluation of miniaturized broad-band UV-VIS-NIR spectrometers for implementation in a laser-induced plasma spectrometer for planetary research
6MS3-PS-17	Maike Brigitte Neuland et al	A miniature laser ablation mass spectrometer for quantitative in situ chemical composition measurements of rocks and soil on a planetary surface
6MS3-PS-18	Oleg Khavroshkin et al	Lunar seismic noise: new astrophysics periodicity & neutrinos
6MS3-PS-19	Michael Shpekin et al	Some objectives of the study and exploration of the Moon
6MS3-PS-20	Jinsong Ping et al	Two-Way Lunar Radio Ranging and Preliminary Result from CE-3 Mission

## Giant Planets and their moons

6MS3-PS-21	Gennady Kochemasov	Hexagonal figures in Saturnian system and on Ceres
6MS3-PS-22	Victor Tejfel et al	The evidences of latitudinal asymmetry of the ammonia absorption on Saturn
6MS3-PS-23	Victor Tejfel et al	The study of methane-ammonia absorption on Jupiter in the visibility season of 2015
6MS3-PS-24	Victor Kronrod and Andrei Makalkin	Capture of material by the circumplanetary disks of Jupiter and Saturn due to interaction of the falling planetesimals with the gaseous medium of the disks.
6MS3-PS-25	Elena Belenkaya	Dynamo action beyond the magnetospheres of quickly spinning planets and heliopause
6MS3-PS-26	Andrei Makalkin et al	Formation of planetesimals: effect of particle layer interaction with surrounding gas in the protoplanetary disk and fractional particle sublimation on the water-ice evaporation front.

## Solar System Small Bodies

6MS3-PS-27	Maxim Zaitsev et al	Characterization of the complex organic compounds synthesized by laser vaporization of silicates in nitrogen-methane atmosphere: Application for the impact-induced prebiotic synthesis
6MS3-PS-28	Fabrice Cipriani et al	Definition of Environment specifications for the Asteroid Impact Mission (AIM)

## Dust and dusty plasma in space

6MS3-PS-29	Sergey Popel and A. Yu. Dubinskii	On formation of water molecules incorporated in near-surface lunar regolith
6MS3-PS-30	Vladimir Cheptsov et al	Long-Term Impact of Low Pressure on Bacterial Biodiversity and Activity in Soil and Sediments
6MS3-PS-31	Evgeny Lisin and I.A. Kuznetsov	On the possibility of photoinduced levitation of dust particles under ground-based laboratory conditions

## Venus

6MS3-PS-32	Mikhail Luginin et al	Retrieval of aerosol properties in the upper haze of Venus using SPICAV-IR data
6MS3-PS-33	Anna Fedorova et al	Cloud top and water vapor variations in the Venus' mesosphere from the SPICAV observations
6MS3-PS-34	Daria Evdokimova et al	Variations of SO <sub>2</sub> content at the night side of Venus' mesosphere
6MS3-PS-35	Marina Patsaeva et al	Dependence of longitudinal distribution of zonal wind and UV albedo at cloud top level on Venus topography from VMC camera onboard Venus Express
6MS3-PS-36	Leonid Ksanfomality et al	Possible signs of fauna and flora on Venus
6MS3-PS-37	Anatoly Gavrik et al	Multi-frequency phase-coherent systems: new instrument for occultation in the project Venus-D
6MS3-PS-38	Azariy Barenbaum	Formation of analogous geological structures on terrestrial planets by Galaxy's comets (I): the galactic comets and their mechanism interaction with planets
6MS3-PS-39	Azariy Barenbaum	Formation of analogous geological structures on terrestrial planets by Galaxy's comets (II): factual data and their discussion

## Mars

6MS3-PS-40	James Dickson et al	Conditions and strategies for detecting ephemeral brine activity at the Mars Science Laboratory landing site, Gale Crater, Mars
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<b>6MS3-PS-41</b>	James Dickson et al	Concentrating Ice in Polar Deserts: Lessons for Mars from Punctuated Gully In-cision in the McMurdo Dry Valleys
<b>6MS3-PS-42</b>	James Cassanelli and James Head	Ice Sheet Lava-loading on Late Noachian Mars: Implications for Meltwater Generation, Groundwater Recharge, and Geomorphology
<b>6MS3-PS-43</b>	David K. Weiss and James W. Head	Degradation State of Noachian Highland Craters: Assessing the Role of Crater-Related Ice Substrate Melting in a Cold and Icy Mars
<b>6MS3-PS-44</b>	Kenneth Ramsley and James Head	The secondary impact ejecta spike of Phobos from Stickney Crater
<b>6MS3-PS-45</b>	Sergey Krasilnikov	Morphometric characteristics of polygonal structure of Mars depending on surface morphology
<b>6MS3-PS-46</b>	Elodie Gloesener et al	Modeling water vapor transport in the Martian subsurface
<b>6MS3-PS-47</b>	Ruslan Kuzmin et al	Study of the seasonal variations of the water equivalent of hydrogen amount in the subsurface regolith on Mars based on the HEND data accumulated during the five Martian years
<b>6MS3-PS-48</b>	Vladimir Zharkov et al	Anomalous density waves method for estimating the stresses in the crust and mantle of Mars
<b>6MS3-PS-49</b>	Tamara Gudkova and Vladimir Zharkov	Martian interior structure models: tradeoff between the density of the crust and Fe content in the mantle
<b>New Projects and experiments</b>		
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<b>6MS3-PS-51</b>	Alexandre Skalsky et al	The electromagnetic phenomena at Mars and their survey at landing platform
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<b>6MS3-PS-53</b>	Yuri Ozorovich et al	Yupiter's Moon Europa: Planetary Geoelectrical Markers and Oreols of the Liquid Ocean under the Ice on the Surface of the Yupiter's Moon Europe
<b>6MS3-PS-54</b>	Oleg Khavroshkin et al	Periodicity of radioactivity source: channels of registration & physical mechanism
<b>6MS3-PS-55</b>	Ilia Kuznetsov et al	Dust Complex onboard the ExoMars-2018 lander for investigations of Martian dust dynamic