

9M-S3 PRELIMINARY PROGRAM

(oral and poster presentations suggested to 9M-S3 Program)

Session MARS

1.	James W. Head et al	Oceans on Mars? Testing the Oceans Hypothesis
2.	J. W. Head et al	Mars Climate History: 'Warm and Wet' or 'Cold and Icy'?
3.	Ashley Palumbo and J. Head	A Warm and Wet Mars at 273 K: Geologic Processes and Water Stability
4.	Ben Boatwright and J. Head	Noachian Crater Degradation: Comparing Models and Observations
5.	Adeene Denton and J. Head	Nature of Deep Substrate in the Arabia Terra Region: Evidence for Subsurface Volatiles and Implications
6.	Sierra Kaufman et al	Lack of Correlation Between Phyllosilicate Locations and Valley Networks: Implications for Alteration History
7.	Jessica Flahaut et al	Fumarolic alteration on Mars : lessons learned from terrestrial analog fieldwork
8.	Oleg Korablev	First Results of ExoMars2018
9.	Håkan Svedhem	The ExoMars Trace Gas Orbiter, status and selected results
10.	Jordanka Semkova et al.	Recent results for the space radiation environment in Mars' orbit provided by FREND's Liulin-MO dosimeter aboard ExoMars TGO
11.	Mikhail Luginin	Modeling of aerosols for TIRVIM solar occultations
12.	Diego Rodríguez Díaz et al	AMR instrument for ExoMars' 2020 Surface Platform. Development status, calibration and qualification.
13.	Majd Mayyasi	Atmosphere and Ionosphere of Mars from MAVEN Observations
14.	S. Jiménez et al	RETRIEVAL OF AN INDUCED MAGNETIC FIELD IN MARS IONOSPHERE FROM MARSIS DATA. EFFECTS OF CRUSTAL AND NONCRUSTAL FIELDS
15.	J.L. Vazquez-Poletti et al	Serverless On-Demand MARSIS Ionogram Processing on a Public Cloud Computing Infrastructure
16.	M. P. Velasco et al	Fractional Models to Simulate the Martian Atmospheric Dust Dynamics
17.	V.Ogibalov	Non-equilibrium radiative transfer in the ro-vibrational CO ₂ bands in the Martian atmosphere taking account of radiation extinction by aerosols
18.	R.A. Lukmanov et al	Biosignatures detection from 1.88 Ga Gunflint chert with LMS suite
19.	Sergey Bulat et al	MARINILACTOBACILLUS SP AND TWO MORE BACTERIA IN THE SUBGLACIAL ANTARCTIC LAKE VOSTOK
20.	M.A. Ivanov et al	ExoMars landing sites in Oxia Palus and Mawrth Vallis: geological characterization
21.	Jürgen Oberst	BENEFIT FOR MARS POLAR SCIENCE FROM A MISSION TO VERY-LOW (< 150 km) ORBIT
22.	M.A. Ivanov et al	ExoMars landing sites in Oxia Palus and Mawrth Vallis: small craters and rocks
23.	T.Gudkova et al	Three-level loading model for calculation of stress state in

		Mars
24.	A.V. Batov et al	About the zones of possible marsquakes
25.	Kochemasov G.G.	The new wave planetology shown in the martian satellites: shrinking Phobos and swelling Deimos
26.	S.V. Kulikov et al	Mars: Electromagnetic survey at the landing platform
27.	A. S. Kosov et al	LaRa (Lander Radioscience) on the ExoMars 2020 Surface Platform – Rotation of Mars and Positioning of the Surface Platform
28.	M. Dominguez-Pumar et al	A miniaturized 3D wind sensor for planetary exploration
29.	M. Zaitsev	The use of the EtO gas sterilization for the Planetary Protection requirements fulfilment on the "ExoMars-2020" mission
30.	W.X. Li et al	LUNAR RADIO RANGING AND THE PROSPECT OF MARTIAN RADIO RANGING
31.	E. Grishakina	Martian soil simulant for large-scale field experimental research
32.	S. Bermejo et al	POTENTIAL OF NANOPARTICLE SELF-ASSEMBLED LAYER FOR OPTICAL INSTRUMENTS
33.	A. A. Belov et al	HALOTOLERANCE OF BACTERIA FROM EXTREME ECOSYSTEMS: IMPLICATIONS FOR ASTROBIOLOGY
34.	V. Cheptsov	Survivability of soil microbial communities after irradiation with accelerated electrons under low pressure and low temperature conditions
35.	Haiming Wang et al	Bibliometric Evaluation of the Development Trend of Mars Exploration Research
36.	Neeraj Pradhan	GENERAL CHARACTERISTIC OF PLANET MARS

Session MOON

1.	J Head and L. Wilson	Origin of Irregular Mare Patches and Ring-MoatDome Craters on the Moon: Ancinet Late Stage Volatile Release
2.	J. Head and Carle Pieters	The South Pole-Aitken Basin as a Lunar FarsideMission Destination
3.	M.A. Ivanov et al	Geologic history of the northern portion of the South Pole-Aitken basin on the Moon
4.	Jessica Flahaut et al	Lunar polar regions of Interest for future exploration
5.	B. A. Ivanov	Seismic shaking role in small lunar crater degradation
6.	B.H. Foing(ESA/ESTEC) et al	EUROMOONMARS PILOT PROGRAMME FOR RESEARCH, TECHNOLOGY, TRAINING AND FIELD SIMULATIONS
7.	John Clarke	High Resolution UV Spectrograph to Study Lunar and Planetary Atmospheres and the Interplanetary Medium
8.	M.A. Sundeeva et al	THE DISTRIBUTION OF THE CONCENTRATIONS (ANOMALIES) OF THE WATER EQUIVALENT OF HYDROGEN AS A FUNCTION OF THE RELIEF AT THE POLAR REGIONS OF THE MOON REGARDING THE LRO DATA
9.	R. F. Fausch et al	NEUTRAL GAS MASS SPECTROMETROMETER FOR THE LUNA RESURS MISSION: STATUS, PERFORMANCE AND SCIENTIFIC IMPLICATIONS

10.	Jinsong Ping et al	SOME PRE-STUDIES ABOUT THE CANDIDATE LANDING AREA FOR CHANG'E-4 PROJECT
11.	Mingyuan Wang	LUNAR IONOSPHERE AND PLANETARY RADIO EMISSIONS DETECTION BASED ON RADIO EXPERIMENTS OF CHINESE SPACE MISSION
12.	A.Gusev et al	ON EVE OF THE GLORIOUS JUBILEE: 60 YEARS OF THE MOON'S EXPLORATION BY SPACECRAFTS
13.	Neeraj Kumar Pradhann	THE MODULAR MOBILE LUNAR BASE CONCEPT THE MOST REDUNDENT APPROACH FOR HABITAT ARCHITECTURE [HAB-ROB]
14.	P. Wurz et al	SURFACE RELEASE PROCESSES TO POPULATE MERCURY'S EXOSPHERE
15.	Ariel Deutsch and J. Head	Lunar Polar Deposits: Comparison to Mercury
16.	A.Yu. Zharkova et al	MERCURY RELIEF: ANALYSIS AND MORPHOLOGICAL CLASSIFICATION
17.	Fred Singer	Origin of planetary satellites
18.	Rudolf Dvorak	On the formation of terrestrial planets in our Solar System
19.	S. I. Ipatov et al	Variation of near-Earth object population based on analysis of diameters of lunar craters
20.	Lu Yangxiaoyi et al	Lunar physical exploration system of Chang'e-4 landing area
21.	E.V. Kronrod et al	COUPLED GEOPHYSICAL-GEOCHEMICAL MODELING OF THE MOON
22.	Barenbaum A.A. et al	CUMULATIVE FORMATION OF MARES AND MASCONS ON MOON BY GALACTIC COMETS
23.	N.A. Kozlova et al	Morphometry of the average craters of the Moon
24.	Feoktistova E.A. et al	DOUBLET CRATERS ON THE MOON AND MERCURY
25.	S.G.Pugacheva et al	IMPACT OF ASTEROIDS AND METEORITES ON THE LUNAR SURFACE
26.	Kochemasov G. G.	A chain of events -from cosmic to terrestrial - leading to origin and development of the Homo genus
27.	Weiwei Fan et al	BIBLIOMETRIC ANALYSIS OF SOLAR SYSTEM EXPLORATION MISSIONS
28.	A. Sitnikova et al	MOON GALLERY ARTMOONMARS PROGRAMME FOR PUBLIC ENGAGEMENT, OUTREACH, INTERNATIONAL COOPERATION, SPACE EXPLORATION THROUGH ART
29.	Z. Rodionova et al	The History of researches of the Moon by space vehicles depicted on the postage stamps of the world.

Session VENUS

1.	I.D. Kovalenko et al	Trajectory and orbit design for the Venera-D mission
2.	V. D.Gromov et al	An accuracy of the retrieving of Venusian atmospheric data from the Radiometer instrument in the Venera-D mission
3.	Denis Belyaev	Study of UV albedo of Venus clouds as measured by SPICAV and

		VIRTIS instruments
4.	Daria Evdokimova	Variations of the lower cloud layer and water vapor in the deep atmosphere of Venus from the night windows observations by SPICAV-IR/VEX
5.	Mikhail Luginin	Retrieval of aerosol properties from SPICAV-UV and -IR data
6.	Sergey Kolomiets	An adiabatic criterion of the geometrical optics applicability as a foundation of a novel approach to signal interpretations in occultation experiments
7.	E.N.Guseva	MAIN GLOBAL EXTENSIONAL REGIMES ON VENUS
8.	Michael Bondarenko and A.Gavrik	GRAVITY WAVE ACTIVITY AS POSSIBLE CAUSE OF IONOSPHERIC LAYERS REGISTERED BELOW V1 ON VENUS
9.	A.Gavrik	Wave-like structures in the Venus ionosphere during radio occultation
10.	V.N. Zharkov and T.V.Gudkova	On the model estimate of the precession for Venus
11.	V. Snytnikov	ABOUT THE POSSIBLE NATURE OF LIVING FORMS ON VENUS

Session GIANT PLANETS

1.	M. Imai et al	Multi-instrument investigation for Jupiter lightning-induced whistler and sferic events using Juno
2.	S. S. Elliott et al	Electron acceleration to high energies via whistler-mode wave-particle interactions in the Jovian polar regions
3.	A.Mura	The auroral footprints of Galilean moons at Jupiter
4.	T. C. Clarke	Juno and the New Renaissance
5.	Ya.A. Ilyushin and P. Hartogh	SUBMILLIMETER WAVE RADIOMETRY OF THE JOVIAN ICY MOONS' CRUST: NUMERICAL SIMULATIONS
6.	V.G. Tejfel et al	THE AMMONIA ABSORPTION IN THE JOVIAN GREAT RED SPOT
7.	V.V.Sidorenko	THE MULTI-SHELL MODELS OF CELESTIAL BODIES WITH AN INTERMEDIATE LAYER OF FLUID: DYNAMICS IN THE CASE OF THE LARGE VALUES OF THE EKMAN NUMBER
8.	V.A. Kronrod et al	DEPENDENCE OF THE PLANETESIMALS MASS CAPTURED IN GIANT PLANETS ACCRETION DISKS FROM ABLATION PROCESSES
9.	Kochemasov G. G.	Terrestrial catastrophic atmospheric phenomena of the wave nature (El-Nino, cyclon, tornado) and comparison of cyclones on Earth and Jupiter

Session SMALL BODIES

1.	E.N. Slyuta et al	RUSSIAN PROGRAM FOR RESEARCH SMALL BODIES OF THE SOLAR SYSTEM BY SPACECRAFT
2.	Jing Sun	PRELIMINARY WORK ON PROMOTING ASTEROIDS RADIO ASTRONOMICAL STUDY IN CHINA
3.	A. T. Basilevsky et al	LINEAMENTS ON THE SURFACE OF CONSOLIDATED MATERIAL OF THE COMET 67P NUCLEUS
4.	M.Ya.Marov	Numerical simulation of thermal evolution of the comet 67 P/Churyumov-Gerasimenko nucleus
5.	L.V. Ksanfomality	Some dynamic characteristics of the Hale-Bopp comet
6.	E.N. Slyuta and S.A. Voropaev	GRAVITATIONAL DEFORMATION OF SMALL SOLAR SYSTEM BODIES

7.	S.I. Ipatov	Migration of bodies to the Earth and the Moon from different distances from the Sun
8.	Yu. Skorov et al	Gas production rate: myths and analysis.
9.	E.V. Petrova et al	Retrieval of surface properties using polarization and intensity of light reflected by atmosphereless celestial bodies
10.	L. F. Golubeva and D.I. Shestopalov	ASTEROIDS: SPECTRAL PROPERTIES OF POLARIZATION DEGREE
11.	Sergey Efimov	Semi-analytical study of mean motion resonances with application to TNO dynamics
12.	M. Zaitsev	New results on the formation of amino acids from components of a nitrogen-methane atmosphere during hypervelocity impacts"
13.	P. E. Laine	ACCESSING ICY MOON'S OCEAN WITH THERMONUCLEAR REACTOR
14.	S. I. Ipatov et al	Replenishment of the asteroid belt by material from the zone from the giant planets.
15.	V.V. Busarev et al	Observations and some dynamical calculations
16.	V.V. Emel'yanenko	Dynamical evolution and origin of meteorites with short cosmic-ray exposure ages

Session EXOPLANETS

1.	V. Ananyeva et al	Exoplanet mass distribution considering the observation selection factors
2.	A. Tavrov et al	Stellar coronagraph for exoplanet observation onboard the WSO-UV space telescope
3.	A.Yudaev et al	Interference coronagraph with small rotation shear for a ground-based telescope
4.	Shingo Kameda	Ultraviolet Spectrograph for Exoplanets (UVSPEX) onboard World Space Observatory Ultraviolet (WSO-UV)
5.	Yui Kawashima	Effect of UV irradiation intensity on exoplanet atmospheres
6.	V.I. Shematovich et al	ATMOSPHERIC MASS LOSS OF CLOSE-IN EXOPLANETS IRRADIATED BY STELLAR SUPERFLARES
7.	Y. Aoyama et al	Theoretical Model of Hydrogen Line Emission from Accreting Gas Giants
8.	Masahiro Ikoma et al	Theoretical Spectra of Highly-Irradiated Atmospheres of Transiting Exoplanets
9.	Takanori Kodama	Habitability of exoplanets around cool stars explored by UV transit observation
10.	Takanori Kodama et al	The threshold of the runaway greenhouse effect for Earth-like

		planets
11.	V Kotov	Superfast exoplanets and 9600s

Session DUST AND DUSTY PLASMA IN SPACE

1	S.I. Ipatov	Migration of interplanetary dust particles to the Earth and the Moon
2	S. Popel	Formation of Dusty Plasma Clouds as a Result of a Meteoroid Impact onto the Moon
3	Yulia Izvekova	Lower-hybrid turbulence in dusty plasmas over the Moon
4	T.V.Salnikova and S.Ya.Stepanov	ON THE DUST CHARGED PARTICLES AS A PART OF KORDYLEWSKI CLOUDS
5	V.N. Gubenko	Coupling between the internal atmospheric waves and tilted sporadic E-layers in the Earth's ionosphere
6	Yulia Izvekova	Dusty plasmas and vortex motions in the atmosphere of Mars
7	V. Cheptsov	Survivability of bacteria in an impact-type plasma torch
8	A.Demyanov	Detector of space dust METEOR-L

Session SOLAR WIND INTERACTIONS WITH PLANETS AND SMALL BODIES

1.	Oleg Vaisberg	Solar wind interaction with Mars, Venus, and Moon
2.	Elena Grigorenko	A multiscale structure of the cross-tail Current Sheet and its relation to the ion composition according to MAVEN observations in the Martian magnetotail
3.	V.I. Shematovich	AURORAE AT MARS: MODELING AND COMPARISON WITH OBSERVATIONS
4.	S. Shuvalov	Dynamics of Hot Flow Anomalies at Mars
5.	Christoph Lhotka	Orbital stability of charged dust subject to the solar wind and the interplanetary magnetic field