

The First Moscow Solar System Symposium

11 – 15 October 2010

Space Research Institute, Moscow, Russia

Overview - Program

10 October		Arrival							
		10.00 – 11.40	11.40-12.00	12.00-13.30	13.30-15.00	15.00-16.30	16.30-17.00	17.00-18.30	
1	11 October	Opening Session	Coffee-break	Session 1	Lunch	Session 1	Coffee-break	Session 1	Welcome cocktail
		Session 1							
2	12 October	Session 2	Coffee-break	Session 2	Lunch	Session 3	Coffee-break	Session 3	Social events
3	13 October	Session 4	Coffee-break	Session 4	Lunch	Excursions			Social events
				IKI-LA teleconf		Splinter meetings			
4	14 October	Session 5	Coffee-break	Session 5	Lunch	Poster Session	Coffee-break	Poster Session	Concert Conference dinner
5	15 October	PhSRM Science teams working meetings PhSRM and YH-1 working group meeting							
		Russia-France cooperation (splinter meeting)							
16 October		Departure							

Scientific Program

11 October 2010			
10.00 – 10.20		Opening Session	
1MS3-0-1	L.M. Zelenyi	Opening remarks	10.00-10.20
1MS3-0-2	E.M. Galimov		
1MS3-0-3	J. Head		
10.20 – 18.20		Session 1 Mars (science)	
		Chair: O. Korablev	
1MS3-1-1	J. Head	The geologic history of Mars	10.20-10.40
1MS3-1-2	G. Neukum, A. Basilevsky	Episodicity of volcanic and fluvial processes on Mars	10.40-11.00
1MS3-1-3	B. Ivanov	Impact cratering on Mars (HRSC and HiRISE results)	11.00-11.20
1MS3-1-4	L. Kerber, J.W. Head, et al.	The distribution of ash from ancient explosive volcanoes on Mars.	11.20-11.40
1MS3-1-5	I. G. Mitrofanov	HEND: results and new questions after 9 years on the martian orbit	11.40-12.00
Coffee- break			12.00-12.20
1MS3-1-6	O. Witasse	Mars Express: mission status report and scientific highlights	12.20-12.40
1MS3-1-7	V. N. Zharkov	Mars: internal composition. On the hydrogen in the Martian core.	12.40-13.00
1MS3-1-8	R. Arvidson	Importance of coordinated orbital and landed observations for Mars science.	13.00-13.20
1MS3-1-9	G. Klingelhofer et al.	Mossbauer mineralogy at Meridiani Planum and Gusev crater, Summary of 6 years of operations and recent results from the MER Mossbauer spectrometer	13.20-13.40
1MS3-1-10	M.A. Ivanov	Thumbprint terrains in Isidis Planitia, Mars: characteristics and modes of formation	13.40-14.00
Lunch			14.00-15.00
		Session 1 (continuation)	
		Chair: J. Head	
1MS3-1-11	C. d'Uston	Some aspects of the Martian atmospheric variations as seen from Mars Odyssey GRS	15.00-15.20
1MS3-1-12	F. Montmessin	Clouds on Mars: their role in past and present climate	15.20-15.40
1MS3-1-13	A.V. Rodin et al.	Modern climate and hydrological cycle of Mars	15.40-16.00
1MS3-1-14	S.K. Atreya	The interconnected nature of the Martian methane, organics, oxidants, isotopes, and prospects for SAM/MSL	16.00-16.20
1MS3-1-15	V. Shematovich	Suprathermal C, N, and O atoms in the Martian upper atmosphere	16.20-16.40
Coffee- break			16.40-17.00
1MS3-1-16	L. Ksanfomality	Looking for Martian life	17.00-17.20
1MS3-1-17	O. Vaisberg	Plasma populations in the tail of induced magnetosphere	17.20-17.40
1MS3-1-18	E. Dubinin	Plasma environment of Mars and unsolved questions	17.40-18.00
1MS3-1-19	G. De Angelis	Models for Mars and Phobos radiation environments.	18.00-18.20
Close of the Session 1			

12 October 1MS3			
10.00 – 14.00		Session 2 Phobos (science)	
		Chair: A. Zakharov	
1MS3-2-1	P. Rosenblatt	Internal structure and origin of Phobos	10.00-10.15
1MS3-2-2	A. Gusev	Physical librations of Phobos: modern status and perspectives	10.15-10.30
1MS3-2-3	J. Head	Dynamics of groove formation on Phobos by ejecta from Stickney crater: predictions and tests	10.30-10.45
1MS3-2-4	T. Duxbury	Origin of the Phobos grooves	10.45-11.00
1MS3-2-5	J. Murray	New survey of the grooves of Phobos, from Mars Express images	11.00-11.15
1MS3-2-6	J.P. Bibring	Phobos origin: a reappraisal	11:15-11:30
1MS3-2-7	P. Vernazza	Origin of the Martian moons: Investigating their surface composition	11.30-11.45
Coffee- break			11.45-12.00
1MS3-2-8	K. Willner	Phobos DTM and coordinate refinement for Phobos-Soil Mission support	12.00-12.15
1MS3-2-9	L. Ksanfomality	Photometric properties of the Phobos' regolith based on the PHOBOS mission data	12.15-12.30
1MS3-2-10	J-L Bertaux	The Ultra-violet albedo of Phobos as measured by SPICAM on Mars Express	12.30-12.45
1MS3-2-11	C. Pieters	Compositional implications of the color of Phobos	12.45-13.00
1MS3-2-12	M. Giuranna	Compositional interpretation of PFS/MEX and TES/MGS thermal infrared spectra of Phobos	13.00-13.15
1MS3-2-13	B. Gondet, J-P. Bibring, et al.	Phobos observations by OMEGA/Mars Express hyperspectral imager	13.15-13.30
1MS3-2-14	V. Turyshev	Advancing tests of relativistic gravity via laser ranging to Phobos	13.30-13.45
1MS3-2-15	H. Rickman, E. Slaby, J. Gurgurewicz	Investigations on Phobos sample and its analogs: a multi-method approach	13.45-14.00
Close of the Session 2			
Lunch			14.00-15.00

12 October 2010			
15.00 – 18.30		Session 3 Solar System Studies beyond 2011	
		Chair: A. Basilevsky	
1MS3-3-1	R. Schulz	The Rosetta Mission – Exploring Solar System Formation	15.00-15.15
1MS3-3-2	D. Titov	Venus-Express: science highlights and future plans	15.15-15.30
1MS3-3-3	A. Chicarro	The European Robotic Exploration of the Planet Mars	15.30-15.45
1MS3-3-4	Ji Wu et al.	Brief introduction of YINGHUO-1 MICRO-satellite for Mars space environment exploration	15.45-16.00
1MS3-3-5	A.-M. Harri et al.	METNET – Network mission to Mars	16.00-16.15
1MS3-3-6	A.V.Rodin, et al.	Networking studies of Mars climate and interior in the project MARS-NET	16.15-16.30
Coffee-break			16.30-17.00
1MS3-3-7	J. Blamont	Mars Balloon revisited	17.00-17.15
1MS3-3-8	L. Zasova et al.	Venera-D the future Russian mission to Venus	17.15-17.30
1MS3-3-9	L. Zelenyi, V. Khartov, et al.	“Luna-Glob” and “Luna-Resource” missions	17.30-17.45
1MS3-3-10	D. Senske	The Europa Jupiter System Mission: investigating the emergence of habitable worlds around Gas Giants	17.45-18.00
1MS3-3-11	L. Zelenyi, M. Martynov et al.	Europa Lander Mission concept and scientific goals	18.00-18.15
1MS3-3-12	V. Linkin et al.	Fast flight to the boundary of Solar system for precision measurements of not gravitational influences on spacecraft.	18.15-18.30
Close of the Session 3			

13 October 1MS3			
10.00 – 14.00		Session 4 PhSRM	
		Chair: M. Marov	
1MS3-4-1	L. Zelenyi, A. Zakharov	Scientific program of the PhSRM	10.00-10.20
1MS3-4-2	E.M.Galimov, Yu Kostitcyn	Scientific goals of Phobos samples laboratory studies	10.20-10.40
1MS3-4-3	M. Martynov, V. Khartov,	Phobos-Soil mission concept and current status of development	10.40-11.00
1MS3-4-4	E.Akim G. Zaslavsky,et. al	Phobos-Soil Project. Ballistic, Navigation, and Mission Control	11.00-11.20
1MS3-4-5	A. Basilevsky	Landing site selection	11.20-11.40
Coffee- break			11.40-12.00
1MS3-4-6	V. Nazarov	Science Ground Segment for the Phobos-Soil mission	12.00-12.15
1MS3-4-7	Z. Zou	Overview of the YH-1 Science Data System	12.15-12.30
1MS3-4-8	T. Stein	PDS analyst`s notebook: supporting active surface missions and adding value to NASA planetary data archives through integration mission data and documents	12.30-12.45
1MS3-4-9	N.Novikova	Solutions for planetary protection issues in Phobos-Soil expedition	12.45-13.00
Teleconference between IKI and Lavochkin Association			13.00-14.00
Close of the Session 4			
Lunch			14.00-15.00

	Chair	Room	Time
Splinter-meeting OMEGA	J.P. Bibring, L. Zasova	200	15.00-18.00
Splinter-meeting Popigai	V.L. Masaitis	222	15.00-18.00

14 October 1MS3			
10.00 – 13.30		Session 5 Instruments for planetary study	
		Chair: T. Duxbury	
1MS3-5-1	L. Gurvits	Radio astronomy experiments with planetary probes in the Martian system	10.00-10.15
1MS3-5-2	P. Wurz	In Situ Mass Spectrometric Analysis in Planetary Science	10.15-10.30
1MS3-5-3	M. Tulej	On chemical analysis of solids by miniature laser-ablation TOF MS designed for space research	10.30-10.45
1MS3-5-4	C. Huang	Determination of the Mars gravity field from two satellites' orbits data: a simulation	10.45-11.00
1MS3-5-5	J. S. Ping, et al	To promote the radio science progress in the YH-1 mission	11.00-11.15
1MS3-5-6	H. Hanada	Development of selenodetic instruments for Japanese lunar explorer SELENE-2	11.15-11.35
Coffee- break			11.35-11.50
1MS3-5-7	T. Kuroda	Development of the Sub-millimeter Instrument onboard Japanese Martian Orbiter	11.50-12.05
1MS3-5-8	T. Iwata	Four-way Doppler measurements and inverse VLBI observations for the Mars rotation observations	12.05-12.20
1MS3-5-9	P. Schibler	OPTIMISM (Mars96) seismic experiment revival	12.20-12.35
1MS3-5-10	L. Friedman et al	Living interplanetary flight experiment (LIFE): the first test of life on an interplanetary flight	12.35-12.50
1MS3-5-11	V. Sychev	Experiment Biophobos/Anabyosis in project Phobos-Soil	12.50-13.05
1MS3-5-12	E. Vorobyova	BIOFOBOS: influence of space environment on soil microbial ecosystems	13.05-13.20
Close of the Session 5			
Lunch			13.20-15.00

14 October 1MS3			
15.00 – 18.00			
Poster Session 1. Mars and its moons			
1MS3-PS-1	M. Waehlich	Updating the high resolution Phobos ortho image mosaic from HRSC images	
1MS3-PS-2	S.S. Dubov et al.	Modeling of stereo image processing for control point catalogue using new data in frame of Phobos-Soil project	
1MS3-PS-3	A. V. Bagrov	Close encounters of the Phobos-Soil Space probe with interplanetary meteor streams	
1MS3-PS-4	A. V. Bagrov	Establishing of fine co-ordinate frame for Mars and atmosphere-less bodies.	
1MS3-PS-5	M. Gritsevich	Interaction of meteoroids with planetary atmospheres	
1MS3-PS-6	A. Berezhnoy	Chemistry of meteor events on Mars	
1MS3-PS-7	S. Pugacheva	Morphology of Mars' relief in the areas of photographic survey of the planet surface by the spacecrafts. notation system of topographic objects	
1MS3-PS-8	V.-P. Kostama, et al	Various ice-deposits in the Hellas basin rim region, Mars	
1MS3-PS-9	B. Ehlmann	How much clay is on Mars? Lessons from visible/near-infrared (VNIR) and XRD study of hydrated silicate mineral assemblages in altered basalts from Iceland	
1MS3-PS-10	I. Fleischer	Cobbles and Iron meteorites at Meridiani Planum, Mars	
1MS3-PS-11	G. Uymin	Development of Limb-Scattering radiative Transfer Models for Mars Remote Sensing and Data Assimilation	
1MS3-PS-12	E. I. Schaefer, J. W. Head, and S. J. Kadish	An unusual fresh impact crater on Mars: evidence for the presence of a recent ice-rich mantle	
1MS3-PS-13	S. J. Kadish, J. W. Head	Pedestal craters on Mars: evidence for the preservation of layered paleodeposits.	
1MS3-PS-14	J.W. Head, D.R. Marchant	Evidence for global-scale northern mid-latitude glaciation in the Amazonian period of Mars: debris-covered glacier and valley glacier deposits in the 30°-50°N latitude band..	
1MS3-PS-15	C. I. Fassett, J. W. Head	Early Mars: conditions, events and scenarios.	
1MS3-PS-16	D. M. Hurwitz, C. I. Fassett, J. W. Head, L. Wilson	Analysis of the origin of an eroded channel in an Elysium Planitia crater.	
1MS3-PS-17	V.G.Mordovskaya, V. A. Styashkin	The specific signatures of the solar wind-phobos interaction as evidence of the phobos magnetic field from the Phobos 2 data.	
1MS3- PS-18	A. Fraeman	The effects of viewing geometry and temperature on OMEGA and CRISM Phobos observations.	
1MS3- PS-19	F.Cipriani	Modelling of reflected hydrogen and protons signatures at Phobos' orbit	
1MS3- PS-20	J. Eluszkiewicz	New Results from TES Polar Retrievals	
1MS3- PS-21	J. Ping	Primary results on Martian Ionosphere from MARSIS/MEX	
1MS3- PS-22	R. A. Evdokimov, et al	Remote power supplying of equipment for planetary explorations	

Poster Session 2. Experiments on the Phobos-Soil, the YH-1 and other missions		
1MS3-PS-23	D.Rodionov et al.	The moessbauer spectrometer MIMOS II on the Phobos Sample Return Mission
1MS3-PS-24	O.I. Korablev, et al.	Fourier Spectrometer AOST
1MS3-PS-25	M.Gerasimov et al.	Gas-Analytic Package of The Phobos Sample Return Mission.
1MS3-PS-26	E.M.Galimov, M.Ya. Marov, L.P.Moskaleva, A.G.Dunchenko, V.V.Visochkin, O.B.Khavroshkin	Complex of scientific equipment for attestation of the place of landing on Phobos for the Phobos-Soil spacecraft: METEOR, FOGS, MAL-1, TERMOPHOB, SEISMO,
1MS3-PS-27	O.B.Khavroshkin, V.V.Tsyplakov	Seismology of Phobos: from Geophysics to Cosmogony
1MS3-PS-28	G.G. Managadze et al.	Study of basic geochemical properties of Phobos regolith using Laser Ablation TOF Mass-Reflectron
1MS3-PS-29	G.G. Managadze et al.	Determination of the surface-averaged composition of Phobos regolith from secondary ion flux measurements in the MANAGA-P experiment of the "Phobos-Soil"
1MS3-PS-30	A.B.Manukin et al.	Seismo-gravimeter "Gras-F" for measurement variations of the gravitational and inertial fields on surface of the Fobos.
1MS3-PS-31	O.N.Andreev,A.Lipatov et al.	Libration celestial mechanics experiment
1MS3-PS-32	G.A.Avanesov et al.	Television System for navigation and observation
1MS3-PS-33	G.A.Avanesov et al.	System of the scientific payload information support of the Phobos-Soil mission
1MS3-PS-34	O.E.Kozlov	Manipulator Complex of the Phobos-Soil Spacecraft
1MS3-PS-35	A.Skalsky	PhPMS experiment: Phobos Plasma Magnetic System onboard the Phobos Soil Mission
1MS3-PS-36	A.V.Bondarenko et al.	System of technical vision of the manipulator complex SC "Phobos-Soil"
1MS3-PS-37	J.Semkova et al..	LIULIN – F instrument for radiation monitoring during the flight of interplanetary probe "Phobos-Soil"
1MS3-PS-38	V.M.Smirnov	Evaluation of parameters layered ground on measurements of long wave Orbiter Radar
1MS3-PS-39	J. Grygorczuk et al.	CHOMIK sampling device
1MS3-PS-40	J. Zheng	Trajectory of YH-1 and MROE with Phobos-Soil for 2011 Launch Window
1MS3-PS-41	Y. Sun et al.	Overview of scientific Payloads System of China-Russia Joint Mars Exploration Program YH-1
1MS3-PS-42	L. Li et al.	Dual spacecraft observations of the Martian plasma environment
1MS3-PS-43	X. Hu et al.	YH1-Phobos-Soil Martian ionosphere radio occultation experimental research
1MS3-PS-44	N. Petrova et al.	Lunar physical libration in the ILOM project (Japan): simulating of star tracks
1MS3-PS-45	T. Yu. Drozdova, et al.	Optical Solar Sensor
1MS3-PS-46	I. Leya et al.	A critical comparison: in-situ- and laboratory instruments

15 October 1MS3

10.00 – 18.00	working meetings	
11.00-13.00	<p>PhSRM working meeting</p> <p>Participants:</p> <ul style="list-style-type: none"> -PS, PI's and staff -Landing Site Selection science team -Ballistic, navigation and mission control specialists -MEX scientists -Data Management, data products and Archive Specialists (data content, conventions, format) 	Conference-hall
13.00-14.00	Lunch	
14.00-18.00	PhSRM and YH-1 working meeting	200 room

Time	Splinter-meeting	Coordinator	Room
14.00-20.00	Russia-France cooperation	M. Mogilevsky	Conference hall

