

Session Date	Session time	Session Title (session chairs)	Lead Author Last Name	Lead Author First Name	Paper Title
Room #1					
3/3/2007	10:30-12:00	Methods and Techniques for Subsurface Access, Sample Acquisition and Preparation: I (Zacny, Beegle, Mukherjee)	1 Guerrero	Jose	Planetary Drill Technology Development and Advancement Results
			2 Zacny	Kris	1 meter 2 Mars – Development of a 1m Class Drills and Test Chamber for Mars Applications
			3 Costel	Pierre	Current ESA Developments of Subsurface Drills and Sampling Mechanisms
			4 Manthri	Sandeep	Experimental Investigation of Drilling Performance of PCD Compact Core Drills on Basalt Simulating Sustainable Dry Drilling on Mars
			5 Han	Gang	Drilling Deep on the Mars: Challenges and Design of Key Technologies
			6 Chu	Phil	Ground Testing of the Icy Soil Acquisition Device for the 2007 Phoenix Mars Lander Mission
3/3/2007	1:30-3:00	Lunar/Mars Surface Architectures: Habitats (Bell, Malla)	1 Bannova	Olga	Terrestrial Analogs for Planetary Surface Facility Planning and Operations.
			2 Schaeferl	Frank	Simulated Meteoroid Impact of Sustainable Lunar Habitat Shielding
			3 Bell	Larry	Pneumatic Membrane Structures for Space and Terrestrial Applications.
			4 Malla	Ramesh	Dynamic Analysis of a 3-D Frame-Membrane Lunar Structure Subjected to Impact
			5 Gaviraghi	Giorgio	Alternatives for the First Lunar Bases
			6 Dodiya	Abhishek	Human Utilization of Subsurface Extraterrestrial Environments
3/3/2007	3:30-5:00	Lunar/Mars Surface Architectures: Operations (Benaroya, Pavlova)	1 Lowman	Paul	A Summary of the Rutgers Symposium on Lunar Settlements
			2 Ahn	Il-Sang	Application of Performance-Based Design to Lunar Habitat
			3 Weisbin	Charles	Human-Robot Synergy in Science Exploration Of the Lunar Surface
			4 Sherwood	Brent	Labor Partitioning for Planet Surface Operations
			5 Jones	Randy	Virtual Autonomous Navigation Environment
3/4/2007	10:30-12:00	Surface Operations and In Situ Resource Utilization (Sanders, Larson)	1 McLemore	Carole	From Lunar Regolith To Fabricated Parts Technology Developments and the Utilization of Moon Dirt
			2 Zacny	Kris	Pneumatic Lunar Regolith Excavator and Transport System
			3 Sueyoshi	Katsuya	Reaction Mechanism of Various Kinds of Lunar Soil Simulants by Hydrogen Reduction
			4 Bernold	Leonhard	ISRU for Lunar Surface Structures
			5 Lee	Pascal	Field Science and Exploration Requirements for Lunar and Planetary Outposts: Lessons from Arctic and Antarctic Stations.
			6 Maeshima	Ayako	City planning on the moon
3/4/2007	1:30-3:00	Lunar Architecture Team Habitation Focus Element Results – Design Concepts (Toups, Kennedy)	1 Toups	Larry	Results of the Habitat Focus Element Team Support of the Lunar Architecture Team (LAT) Phase 2 - Habitat Concepts Overview
			2 Kennedy	Kris	Lunar Architecture Team – Phase 2 Architecture Option-2 Habitation Concepts
			3 Kennedy	Kris	Lunar Architecture Team - Phase 2 Architecture Option-3 Habitation Concepts
			4 Kennedy	Kris	Lunar Architecture Team – Phase 2 Architecture Option-4 Habitation Concepts
			5 Knight	Amanda	Pressurized Logistics Module: Providing consumables and logistics
3/4/2007	3:30-5:00	Lunar Architecture Team Habitation Focus Element Results – Analyses & Assessments (Toups, Kennedy)	1 Dorsey	John	Structural Definition and Mass Estimation of Lunar Surface Habitats for the Lunar Architecture Team Phase 2 (LAT-2) Study
			2 Griffin	Brand	Sizing Lunar Habitats – Diameter Sensitivity
			3 Griffin	Brand	Lunar Habitat Airlock/Suitlock
			4 Griffin	Brand	Using Water for Lunar Habitat Radiation Protection
			5 Rudisill	Marianne	Lunar Architecture Team - Phase 2 Habitat Volume Estimation: Caution When Using Analogs
			6 Carpenter	Amanda	Lunar Surface Habitat Configuration Assessment: Methodology and Observations
3/5/2007	10:30-12:00	Methods and Techniques for Subsurface Access, Sample Acquisition and Preparation: II (Zacny, Beegle, Mukherjee)	1 Shaller	Philip	Dig or Drill? Weighing Options For Robotic Planetary Subsurface Exploration Missions
			2 Crabtree	Jason	Helical Anchors: Lateral Resistance For Shaping the Lunar Surface
			3 Beegle	Luther	Development of an Automated Sample Processing system for in situ chemical analysis
			4 Dreyer	Christopher	Robotic Thin Sections Preparation for Planetary Applications
			5 Mumm	Erik	Sample Manipulation System for Sample Analysis at Mars
			6 Akin	David	Autonomous Dexterous Sampling: From the Arctic Ocean to Mars and Beyond
3/5/2007	1:30-3:00	In-situ instrumentation and Sensors for Extreme Environments (Dreyer, Beegle)	1 Martin	Joseph	In-Situ Geologic Analyzer for Lunar and Martian Surfaces.
			2 Dreyer	Christopher	Micro-LIBS for Space Exploration
			3 Seshadri	Suresh	In-situ Measurements to Detect Water/Ice in Planetary Regolith
			4 Schibler	Patrick	The Seis-Exomars Experiment: A Planetary Seismometer for Mars
			5 Wilcox	Jaroslava	High Voltage Power Supply for the AEXS Instrument

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Room #2					
3/4/2007	10:30-12:00	Advanced Technologies for Future Planetary Missions (Mungas, Willis).	1 Mungas	Greg	NOFB Monopropellant Technology for the Planetary Exploration
			2 Turek	Philip	Propellantless Space Exploration Using Asteroids
			3 Kennedy	Kriss	Lunar Lander Strategies
			4 Willis	Paul	Qualification of Spacecraft Materials for Use in Harsh Radiation Environments
			5 Lant	Christian	Zero Boil-Off Tank Experiment to Characterize Pressure Control Behavior in Microgravity
			6 Kehoe	Robert	Development of Facilities to Support New Space Programs
3/4/2007	1:30-3:00	Planetary Mechanisms Driven by Electroactive Actuation Materials (Bar-Cohen, Shrout)	1 Vinogradov	Aleksandra	Basic Characteristics, Modeling and Applications of PVDF
			2 Aldrich	Jack	Characterization of piezoelectric stacks as actuators
			3 Jordan	Scott	Novel High-Stiffness Active Structure Actuators Built On Piezo-Based Principles
			4 Djuth	Frank	Development of PVDF-based Actuators for Adaptive Control of Large Space Antennas
			5 Sherrit	Stewart	1KW Power Transmission using Wireless Acoustic-Electric Feed-through
3/4/2007	3:30-5:00	Advanced Technologies Supporting Space Exploration (Zacny, Tai Sik Lee)	1 Higdon	Kevin	Incorporating the Use of Rapid Prototypes and Multidisciplinary Design Optimization in the Development of Human Spacecraft
			2 Guest	Sara	Urine Pretreatment in Advanced Water Recovery Systems for Human Space Exploration
			3 Thompson	Moriah	Characterization of Urine Supernatant Following Struvite Precipitation for Space Colonization Applications
			4 Kurwitz	Cable	Reduced Gravity Direct Contact Heat Exchanger for Cabin Air Dehumidification
			5 Karthik	K	Protection of Communication Systems from Solar Flares
			6 McGown	Robert	Mountain - Space Analogues: Gravity & g-net Forces
3/5/2007	10:30-12:00	Space Commercialization, Policy and Law (Eckert, Blubaugh)	1 Lee	Tai Sik	Commercialization of Space - Korea View
			2 Lee	Tai Sik	Strategies for Promotion for Those Nations that are Newly Entering the Space Development
			3 Ghayur	Adeel	Organization for Space Affairs and Settlement (OSAS): The Vision for Space Exploration and Settlement
			4 Alcorn	Jeremey	U.S. Space Transportation and Climate Change: Potential Impacts of Climate Change on Access to Space
			5 Marzwell	Neville	PISCES: Developing New Design, Materials and Technologies for Sustained Human Presence on the Moon and Mars
			6 Mahmoud	Haytham	Diversity and Space Construction Safety Laws
3/5/2007	1:30-3:00	NASA and Caterpillar Innovative Partnership (Eckert, Blubaugh)	1 Blubaugh	Michele	NASA and Caterpillar: An Innovative Partnership
			2 Huber	Eric	Implementation of 3d, LIDAR-based, vision to improve the safety of grading and excavation machines
Room #3					
3/5/2007	1:30-3:00	Remote Sensing and Enabling Technologies (Thakur, Giridhar)	1 Thakur	Praveen	Remote Sensing of Icy Satellites of Saturn - A Precursor For ISRU Missions to Sector 6
			2 Thakur	Praveen	Remote Sensing Of Lunat Poles with Chandryayaan-1 for water Ice Studies
			3 Thakur	Praveen	Remote Sensing of Mars Schiaparelli Canali to Valles Marineris
			4 Mittapalli	Giridhar	Evaluation of Watershed Parameters using RS and GIS
			5 Mittapalli	Giridhar	Mapping of Evapotranspiration Zones in India using GIS