

Monday April 30, 2018

Time	Presentation Title	Presenter	Affiliation
10:00 AM	Short Organ Performance, Conference Welcome and Keynote Introduction	Dr. Jordi Puig-Suari	California Polytechnic State University
10:15 AM	Keynote Address I	Major General Stephen N. Whiting	Commander, 14th Air Force, Air Force Space Command; and Deputy Joint Force Space Component Commander, U.S. Strategic Command, Vandenberg Air Force Base, California
10:45 AM	BREAK		
11:15 AM to 12:45 PM	BIG PICTURE SESSION		
11:15 AM	Critical Vulnerabilities in the Space Domain: Using Nanosatellites as an Alternative to Traditional Satellite Communications	Philip Swiretek	Naval Postgraduate School
11:30 AM	Improving Mission Success of CubeSats	Catherine Venturini	The Aerospace Corporation
11:45 AM	Design and Test Methods to Increase Mechanism Reliability in CubeSats	Walter Holemans	Planetary Systems Corporation
12:00 PM	From NanoRacks to Satellite Developers: Lessons Learned for Spacecraft and Mission Design	Conor Brown	NanoRacks
12:15 PM	How Much Power is too Much for CubeSats	Boris Yendler	YSPM, LLC
12:30 PM	NASA Centers and Universities Collaborate to Advance Capabilities through STMD SSST SmallSat Technology Partnerships	Jim Cockrell	NASA / Ames Research Center
12:45 PM	LUNCH		
1:45 PM to 3:30 PM	LESSONS LEARNED SESSION		
1:45 PM	Design Overview and Lessons Learned from the TBEX CubeSat	Nathanael England	Michigan Exploration Laboratory
2:00 PM	In-flight performance of the Endeavour Platform	Austin Williams	Tyvak
2:15 PM	Corvus-BC On-Orbit Report and Lessons Learned	Brian Cooper	Astro Digital US, Inc.
2:30 PM	OPTOS: Three Years of On-Orbit Experience	Cesar Arza	INTA (Spain)
2:45 PM	NASA's First 6U CubeSat: ECAMSat's Preliminary Flight Results and Lessons Learned	Aaron Cohen	NASA Ames Research Center
3:00 PM	The DM7 and the Future of High Performance Computing in Space	Aaron Zucherman	Morehead State University
3:15 PM	Precision Photometry and Exoplanet Transit Detection with a NanoSat: On Orbit Results of the PiSat Mission	Mathias Nowak	LESIA, Observatoire de Paris
3:30 PM	BREAK - Poster Session (3rd floor of Performing Arts Center)		
4:00 PM to 5:40 PM	INDUSTRY SHORT PRESENTATIONS AND ORBITAL DEBRIS PANEL		
4:00 PM	Cubesat Launch 1-2-3	Monica Jan	Virgin Orbit
4:10 PM	SL-OMV: Enhancing Small Launch Vehicles for Rapid CubeSat Constellation Deployment	Christopher Loghry	MooG Inc
4:20 PM	CubeSat 101 Document Rollout	Scott Higginbotham	NASA KSC Launch Services Program
4:30 PM	Cubesats and The Mitigation of Orbital Debris	Chris Pearson	Roccor
4:40 PM	Space Situational Awareness Sharing	Cynthia Wilson and Brian Caufield	18th Space Control Squadron
4:50 PM	Orbital Debris Panel Organized by The AIAA SmallSat Technical Committee	William Edmonson	NC State University / AIAA SmallSat Technical Committee
5:00 PM	Panel: Norman Fitz-Coy (University of Florida), Shannon Statham (JPL)		
5:50 PM	End of Day Announcements		
6:00 PM to 10:00 PM	Networking Dinner at SLO Brew Rock (855 Aerovista Ln, San Luis Obispo, CA 93401)		

Tuesday May 1, 2018

Time	Presentation Title	Presenter	Affiliation
9:00 AM	Short Organ Performance and Keynote Introduction	Jordi Puig-Suari	
9:15 AM	Key Note Address II	Emmanuel Sautzy	Airbus
10:00 AM	BREAK		
10:30 AM to 12:15 PM	UPCOMING MISSIONS AND MISSION IDEAS		
10:30 AM	MarCO - Ready for Launch	Andrew Klesh	NASA / JPL
10:45 AM	ZACube-2, a South-African Maritime Domain Awareness and Fire Detection Demonstrator Mission	Robert van Zyl	Cape University of Technology
11:00 AM	Nanosatellite Platform Considerations for Machine-to-Machine Communications Applications	Craig Clark	Clyde Space
11:15 AM	Finding Life on Mars Using CubeSat Hardware?	Robert Staehle	JPL, CalTech
11:30 AM	Drag De-Orbit Device (D3) Mission to Demonstrate Controlled Re-Entry using Aerodynamic Drag	Sanny Omar	University of Florida
11:45 AM	A "ThinSat" to Determine Ionospheric Drag and Local Plasma Dynamics	John Roser	U.S. Naval Academy
12:00 PM	The First Deep Space CubeSat Cluster: Lunar Ice Cube, the Other EMI Lunar Orbiter Instruments, Meas-urements, and Implications for Lunar Science and Future Exploration	Pamela Clark	JPL/CalTech
12:15 PM	LUNCH		
1:30 PM to 3:15 PM	SOFTWARE SESSION		
1:30 PM	Development status of Software-Configurable Interface Board for 1U CubeSat	Turtogtokh Tumenjargal	Kyushu Institute of Technology, Japan
1:45 PM	Kubos Software Stack: Designing Flight and Ground Software End to End	Jesse Coffey	Kubos
2:00 PM	Applying the F Prime Flight Software Framework to the ASTERIA CubeSat	Robert Bocchino	Jet Propulsion Laboratory, California Institute of Technology
2:15 PM	Distributed and Stacked Neural Network for Anomaly Detection in Small Satellites	Chetan Kulkarni	Vanderbilt University, NASA Ames Research Center
2:30 PM	Novel Developments from the SwampSat II Mission	Joe Kleespijs	University of Florida
2:45 PM	LetSat-1: A GPU Technology Demonstrator and AI Navigation System	Clifford White	LetSat, LeTourneau University
3:00 PM	Enhanced Configurability CubeSats	Jesse Hammer	Kubos & NASA/JPL
3:15 PM	BREAK - Poster Session (3rd floor of Performing Arts Center)		
3:40 PM to 6:00 PM	INDUSTRY SHORT PRESENTATIONS AND INTERNATIONAL COLLABORATION		
3:40 PM	Expanding Small Satellite Performance Through Enhanced Launch Capability	Justin Carnahan	Tyvak
3:50 PM	A High-Power Articulated Solar Array for Lunar 6U CubeSats	Andrew Kalman	PUMPKIN, Inc.
4:00 PM	Significant Orbit Control for CubeSats Capability: The Flight Experienced Eruption IFM Nano Propulsion Thruster	David Krejci	ENPULSION
4:10 PM	Advances and Experience in CubeSat Propulsion System Technologies	Chris Day	VACCO Industries
4:20 PM	A Space-Compatible Commercial Solar Technology for SmallSats	Aarohi Vihj	Alta Devices, NearSpace Launch, Twigg's Space Lab
4:30 PM	Solutions for Selective Radiation-Hardened Components in CubeSats	Ross Bannatyne	VORAGO Technologies
4:40 PM	Designing and Development of Deployment Solar Panels for CubeSat Missions	Miguel Vazquez	DHV Technology
4:50 PM	StellarStation: Expanding Mission Possibilities through Ground Station Sharing	Naomi Kurahara	Infostellar
5:00 PM to 6:00 PM	International Collaboration Panel Organized by Cal Poly	Amelia Greig	Cal Poly, SLO
	Panel: Hirokazu Masui (KyuTech), Ben Malphrus (Morehead State University), Robert van Zyl (Cape University of Technology), and Xiaozhou Yu (Northwestern Polytechnical University)		
5:30 PM to 6:30 PM	Happy Hour - Drinks and Hors d'oeuvres served in all exhibition areas		

Wednesday May 2, 2018

Time	Presentation Title	Presenter	Affiliation
9:00 AM	Short Organ Performance and Keynote Introduction	Jordi Puig-Suari	
9:15 AM	Keynote Address III	Chris Boshuizen	Data Collective
10:00 AM	BREAK - Poster Session (3rd floor of Performing Arts Center)		
10:30 AM to 12:15 PM	SCIENCE MISSION SESSIONS		
10:30 AM	Microwave Radiometer Technology Acceleration (MiRaTA): Validating New Technology in Radiometric Calibration Techniques and GPS Radio Occultation	Angela Crews	Massachusetts Institute of Technology
10:45 AM	Miniaturized Hyperspectral Imagers for VNIR and SWIR Small Satellite Missions	Anna Rissanen	VTT Technical Research Centre of Finland
11:00 AM	Next Generation of Compact High Spectral Resolution Spectrometers	Sona Hosseini	Jet Propulsion Laboratory
11:15 AM	Cubesat Radio Interferometry Experiment (CURIÉ)	David Sundkvist	Space Sciences Laboratory, University of California at Berkeley
11:30 AM	Measuring Electron Density in the Ionosphere to Detect Precursors of Seismic Events	Aryan Lobie	University of Auckland
11:45 AM	Monitoring Exoplanets Solar Flares with the Star-Planet Activity Research CubeSat (SPARCS)	Daniel Jacobs	Arizona State University
12:00 PM	Designer "Star": Spacecraft Development of the Laser Guide Star for a Large Segmented Aperture Space Telescope	Ewan Douglas	Massachusetts Institute of Technology
12:15 PM	LUNCH		
1:30 PM to 3:30 PM	SUBSYSTEMS AND COMMUNICATIONS SESSION		
1:30 PM	Mechanical and Thermal Material Properties of Restraint Filaments for Use in Low Cost Satellites	Joe Severino	The Aerospace Corporation
1:45 PM	Design of Wireless Attitude Determination and Control System for CubeSats	Yaofang Li	Shanxi Engineering Laboratory for Microsatellites, Northwestern Polytechnical University
2:00 PM	Review of Pocket Rocket, Helicon and QBSO developments at the Australian National University	Rod Boswell	Australian National University
2:15 PM	Comparative Study of CubeSat Propulsion Systems	Amelia Greig	Cal Poly, SLO
2:30 PM	Omnidirectional Optical Communicator for CubeSat Swarms and Constellations	Jose Velazco	Jet Propulsion Laboratory
2:45 PM	Session Architectures for Collaborative Orbit determination Using Ground Station Networks	Srinagesh Sharma	University of Michigan, Ann Arbor
3:00 PM	Optical Ground Station Development for the CHOMPPT CubeSat Mission	Tyler Ritz	University of Florida
3:15 PM	Enabling University-Operated Tracking and Communications for Deep Space Small Spacecraft Missions	Ben Malphrus	Morehead State University and JPL
3:30 PM	BREAK		
4:00 PM to 5:30 PM	EDUCATION AND NEW ENTRANTS SESSION		
4:00 PM	Best Practices and Fundamental Principles for Space Activities: SMF's Handbook for New Actors in Space	Krystal Wilson	Secure World Foundation
4:15 PM	MezriSat: A new 3U CubeSat to monitor Greenhouse Gases	Abdul-Halim Jallad	American University of Ras Al Khaimah
4:30 PM	KSU-CubeSat Project	Feras Abuhaimeed	King Saud University
4:45 PM	Demodulator Modulator of The Earth Station CubeSat-UD for Communication With SATNET Network	Nestor Javier Rodriguez Garcia	Universidad Distrital Francisco José de Caldas
5:00 PM	Design of The ADCS of MYSat-1	Adham Alkhaja	Khailfa University of Science and Technology
5:15 PM	Flight Hardware for the 1U CubeSat EdgeCube	David House	Sonoma State University
5:30 PM	Interpretation of Double Langmuir Probe I-V Characteristics at Different Ionospheric Plasma Temperatures	Shankar Bhattarai	MSc Physics, Department of Physics, Patan Multiple Campus, Tribhuvan University, Lalitpur, Nepal
5:45 PM	Closing Announcements		

ALTERNATE PRESENTATIONS			
LESSONS LEARNED SESSION			
	Case Study And Lessons Learned From CubeSat Missions Using the LinkStar Radio Flight System.	Andrew Santangelo	sci_Zone, Inc.
UPCOMING MISSIONS AND MISSION IDEAS			
	Developments off the Unicorn-1 and Unicorn-2 PocketCube platform, squeezing 3u capability into a PQ.	Tom Walkinshaw	Alba Orbital Ltd
SOFTWARE SESSION			
	CubeSat Software Defined Modem	Katherine Corway	Space Micro Inc
SUBSYSTEMS AND COMMUNICATIONS SESSION			
	CLICK: CubeSat Laser Infrared Crosslink	Angela Crews	Massachusetts Institute of Technology
	Design Miniaturisation: Transposing a Proposed Standard to Meet the Requirements of a Nano-Satellite	Paris Chrysos	Arizona State University/ISC Paris Business School/Libre Space Foundation
	Metal Plasma Thruster for CubeSats	Mahadevan Krishnan	Alameda Applied Sciences Corporation