

SCHEDULE

WEDNESDAY, APRIL 23

DAY 1

7:30:00 AM - 9:00:00 AM Breakfast, courtesy of GAUSS
 9:00:00 AM - 9:10:00 AM Opening, Sponsor, and Keynote Welcome

SESSION 1

9:10 AM - 9:30 AM **Scott MacGillivray**
Tyvak Nano-Satellite Systems
 Main Event Sponsor Welcome

9:30 AM - 9:50 AM **Brigadier General Timothy R. Coffin**
Joint Functional Component Command for Space (JFCC Space)
 Flight Experiences, Advanced Technologies

9:50 AM - 10:10 AM **Twyman Clevments**
Kentucky Space
 KySat-2: Status Report and Overview of C&DH and Comms Systems Design

10:10 AM - 10:20 AM **Chris Boshuizen**
Planet Labs
 On-orbit Results from Dove 3

10:20 AM - 10:40 AM **Ali Guarneros Luna**
NASA AMES
 Pioneering the Use of the International Space Station as a Nanosatellite Deployment Platform

10:40 AM - 11:00 AM **Carl S. Brandon**
Vermont Technical College
 The Vermont Lunar CubeSat Mission

11:00 AM - 11:10 AM Morning Break, courtesy of Raytheon

11:10 AM - 11:30 AM **Robert Twiggs**
Morehead State University
 The PocketQube Concept

11:30 AM - 11:50 AM **Soren Pedersen**
GomSpace
 GOMX-1 Flight Experience and Air Traffic Monitoring Results

11:50 AM - 12:10 PM **Kevin Zack**
Sonoma State University
 Development and Operation of the PocketQube T- LogoQube

12:10 PM - 12:30 PM **J. Garrett Jernigan**
Sonoma State University
 The Application of the Logo Language for the Flight and Ground System of the PocketQube T- LogoQube

12:30 PM - 13:40 PM Lunch, courtesy of NanoRacks and SpaceFlight Inc.

13:40 PM - 14:00 PM **Joseph Gangestad**
The Aerospace Corporation
 Forest Fires, Sunglint, and a Solar Eclipse: Responsive Remote Sensing with AeroCube-4

14:00 PM - 14:20 PM **Eric Baumgarten**
Cal Poly San Luis Obispo
 IPeX Mission and Status Update

14:20 PM - 14:40 PM **Paula Pingree**
NASA JPL
 The Successful Operation of MCubeD/COVE-2

14:40 PM - 15:00 PM **Chantal Cappelletti**
GAUSS
 UniSat5 Mission

15:00 PM - 15:20 PM **Andres Martinez**
NASA AMES
 SporeSat: Measuring the Variable-Gravity Calcium Ion Channel Response in Fern Spores Aboard a Free-flying 3U Nanosatellite

15:20 PM - 15:30 PM **Peter Platzler**
ArduSat
 First Learnings from ArduSat - The World's First Crowdfunded Satellite in Space

15:30 PM - 15:40 PM **Bryan Klofas**
SRI International
 CubeSat Communications Update

15:40 PM - 15:50 PM Afternoon Break, courtesy of Raytheon

15:50 PM - 16:10 PM **Robert Kelley**
Jacobs JETS, Orbital Debris Research & Science Operations
 Orbital Debris Mitigation

16:10 PM - 16:30 PM **Courtney Duncan**
NASA JPL
 Iris Deep Space CubeSat Transponder

16:30 PM - 16:50 PM **Andrew Kalman**
SSDL / Stanford University
 TECSTARS, a NanoSatellite Telemetry Capture, Storage And Retrieval System

16:50 PM - 17:10 PM **Ian Boumelis**
Drexel University
 Deployable Package for Enhanced Power and De-Orbit Capabilities in CubeSat Satellites

17:10 PM - 17:30 PM Closing Remarks

18:00 PM - 22:00 PM Welcome Banquet at the Embassy Suites Hotel Ballroom, courtesy of Airbus Group

THURSDAY, APRIL 24

DAY 2

7:30:00 AM - 8:50:00 AM Breakfast, courtesy of Clyde Space
 8:50:00 AM - 9:00:00 AM Opening

SESSION 2

9:00 AM - 9:20 AM **Prof. Robert van Zyl**
French South African Technical Institute at Cape Peninsula University of Technology
 Early CubeSat Program Development

9:20 AM - 9:40 AM **Raquel Pinho**
University of Porto and TEKEVER Space
 GAMASAT: A 3U CubeSat Communications, De-orbiting and Re-entry Experiment

9:40 AM - 10:00 AM **Cem Asma**
Swiss Space Systems - Space 4 All
 S4 Summer School for Nano-Satellite Technologies

10:00 AM - 10:20 AM **Jaroslav Laifr**
Czech Technical University in Prague
 The CzechTechSat - A- Space Friendly CubeSat-class Picosatellite Development Progress

10:20 AM - 10:40 AM **Francois Visser**
F'SATI CPUT
 A Technical Background of the ZACUBE-i Satellite Mission Series

10:40 AM - 11:00 AM **Gabriel Figueiro**
Brazilian Space Agency
 SERPENS CubeSat Mission

11:00 AM - 11:10 AM Morning Break, courtesy of Raytheon

11:10 AM - 11:30 AM **Mohammed Irfan Rashed**
Korea Advanced Institute of Science & Technology
 Role of Cost-Effective MEMS-Based Nanosatellite and Space Education in Under-developed Countries

11:30 AM - 11:50 AM **Sara Mohammed Ali Ahmed**
University of Khartoum
 University of Khartoum Cubesat Project Feasibility Case Study

11:50 AM - 12:10 PM **Victor Eberhardt Menegon**
Federal University of Santa Catarina (UFSC)
 Brazilian Inter-University CubeSat Mission Overview

12:10 PM - 12:30 PM **StangSat Team**
Merritt Island High School
 Risk Mitigations to Allow for Inter- CubeSat Wi-Fi Communication During Launch

12:30 PM - 13:50 PM Lunch, courtesy of GOM Space

13:50 PM - 14:10 PM **Garrett Skrobot**
NASA KSC LSP
 NASA Educational Launch of Nanosatellite Missions Update

14:10 PM - 14:30 PM **Dan Saldana**
Valley Christian High School
 ISS Science Experiment Presentation

14:30 PM - 14:50 PM **Kennedy Haught**
Morehead State University
 Small Satellite Mission Operations at Morehead State University

14:50 PM - 15:10 PM **Trevor C. Sorensen**
Hawaii Space Flight Laboratory (HSFL)
 Implementing the Comprehensive Open-architecture Space Mission Operations System (COSMOS) to Operate Multiple CubeSats

15:10 PM - 15:30 PM **Samudra E. Haque**
The George Washington University
 Agile development process of a quad-channel Micro-Cathode Arc Thruster (uCAT) subsystem for the 1.5U BRICSat-P CubeSat Mission

15:30 PM - 15:40 PM Afternoon Break, courtesy of Raytheon

15:40 PM - 16:00 PM **Ryan Kingsbury**
MIT
 Two-Stage Control for CubeSat Optical Communications

16:00 PM - 16:20 PM **John Conklin**
University of Florida
 The CHOMPTT Precision Time Transfer CubeSat Mission

16:20 PM - 16:40 PM **D Laurence Thomsen III**
NASA LRC
 Shields-1, A CubeSat With a Radiation Shielding Research Payload

16:40 PM - 17:00 PM **Jeremy Straub**
University of North Dakota
 Considering the Educational Benefits of a CubeSat Program

17:00 PM - 17:20 PM **Andrew Klesh**
NASA JPL
 INSPIRE: Interplanetary NanoSpacecraft Pathfinder in Relevant Environment

17:20 PM - 17:30 PM **Rich Pournelle**
NanoRacks
 Commercial CubeSat Launches from the ISS

17:30 PM - 17:40 PM **Austin Williams**
Tyvak Nano- Satellite Systems
 CubeSat Proximity Operations Demonstration (CPOD) Vehicle and Avionics Design

17:40 PM - 17:45 PM Closing Remarks

FRIDAY, APRIL 25

DAY 3

7:30:00 AM - 8:50:00 AM Breakfast, courtesy of SSL
 8:50:00 AM - 9:00:00 AM Opening

SESSION 3

9:00 AM - 9:20 AM **Ricardo Tubio- Pardavila**
Cal Poly
 The SatNet Project: towards an Open-Source Ground Station Network for CubeSats

9:20 AM - 9:40 AM **Sanny R Omar**
Auburn University Student Space Program
 CubeSat Formation Control using Differential Aerodynamic Forces

9:40 AM - 10:00 AM **Katharine Brumbaugh Gamble**
The University of Texas at Austin
 A Software Tool for CubeSat Mission Risk Estimating Relationships

10:00 AM - 10:20 AM **Chad Frost**
NASA AMES
 Expanding the Global Sensor Web with CubeSats

10:20 AM - 10:40 AM **Samuel Noah Sipe**
USNA
 The Unix Space Server: USS Langley, The World's First Open Source Webserver in Space

10:40 AM - 11:00 AM **David M. Klumppar**
NASA HQ
 An Enhanced Role for Scientific CubeSats at NASA

11:00 AM - 11:10 AM Morning Break, courtesy of Raytheon

11:10 AM - 11:20 AM **Craig Clark**
Clyde Space
 Next Generation Power Systems for CubeSats of All Sizes

11:20 AM - 11:30 AM **Isaacs Nitschke**
Space Systems Loral

11:30 AM - 11:40 AM **Adam Hadaller**
Spaceflight Inc.
 CubeSat Preferred Orbits and Launch Options

11:40 AM - 11:50 AM **Christopher Hartney**
Millennium Engineering and Integration Co.
 Modular Rapidly Manufactured SmallSat: Using Advanced Manufacturing processes for CubeSats

11:50 PM - 12:00 PM **Daniel L. Oltrogge**
Analytical Graphics Incorporated
 QB50 Relative Motion and Deployment Optimization

12:00 PM - 12:10 PM **Joe Maly**
Moog CSA
 CubeSat Launch Accommodations and Propulsive Adapters

12:10 PM - 12:20 PM **Clint Hadwin**
Space Micro Inc
 Radiation and Reliability Considerations in Digital Systems for Next Generation CubeSats

12:20 PM - 13:40 PM Lunch, courtesy of Boeing

13:40 PM - 14:00 PM **James Meub**
Air Force Research Laboratories
 Targeted Mission Assurance Philosophies: A Tale of Two CubeSats

14:00 PM - 14:20 PM **Antonio J. Ricco**
NASA AMES
 BioSentinel NanoSatellite: DNA Damage-and-Repair Experiment Beyond Low Earth OrbitState University

14:20 PM - 14:40 PM **Chris Shaffer**
UCLA
 An Update on UCLA's Electron Losses and Fields Investigation

14:40 PM - 15:00 PM **Tam Nguyen**
MIT
 Infrared Earth Horizon Sensors for CubeSat Attitude Determination

15:00 PM - 15:20 PM **James Chartres**
NASA AMES
 The Nanosat Launch Adapter System (NLAS)

15:20 PM - 15:40 PM Afternoon Break, courtesy of Raytheon

15:40 PM - 15:50 PM **Walter Holemans**
Planetary Systems Corp.
 Innovative Uses of the Canisterized Satellite Dispenser (CSD)Mission

15:50 PM - 16:00 PM **Rex Ridenoure**
Ecliptic Enterprises Corporation
 CubeSat-Class Spinning Landers for Solar System Exploration Missions

16:00 PM - 16:10 PM **Jeroen Rotteveel**
ISIS
 A data processing building block for CubeSat payloads and subsystems

16:10 PM - 16:20 PM **Emil Superfin**
A.I. Solutions
 Flight-software-in-the-loop Dynamics Simulator for Rapid Prototyping of Mission Orbit and (ACS) Studies

16:20 PM - 16:30 PM Closing Remarks