NASA Participation Guide SmallSat2021

smallsat.org

National Aeronautics and Space Administration

This compendium of live and pre-recorded events is limited to those sponsored by and/or have NASA participation. Visit the SmallSat 2021 website for the complete list of conference events and to confirm scheduled times.

LIVE EVENT Side Meetings

https://smallsat.org/conference/side-meetings/

MONDAY, AUGUST 9

- **3:00PM MT** — **NASA Town Hall** — *Small Spacecraft Systems Virtual Institute*

Technical Sessions | PRE-RECORDED On Demand Talks

https://smallsat.org/conference/technical sessions

		CORRESPONDING LIVE Session Q&A Webinars
NEXT ON PAD	**HyTI: Thermal Infrared Spectroscopy from a 6U Platform** — *NASA Jet Propulsion Laboratory*	**MON., AUG. 9** 11:30AM-1:00PM MT
	The NASA Advanced Composite Solar Sail System (ACS3) Flight Demonstration: A Technology Pathfinder for Practical Smallsat Solar Sailing — *NASA Langley Research Center*	11:30AM-1:00PM MT
SCIENCE/MISSION PAYLOADS	**Dynamically Controlling Image Integration Onboard the Star-Planet Activity Research CubeSat (SPARCS)** — *NASA Jet Propulsion Laboratory*	2:00PM - 3:00PM MT
	The EZIE Way to Measure the Ionospheric Electrojets with a Three-CubeSat Constellation — *NASA Jet Propulsion Laboratory*	2:00PM - 3:00PM MT
	The Pandora SmallSat: Multiwavelength Characterization of Exoplanets and their Host Stars — *NASA Goddard Space Flight Center; NASA Ames Research Center*	2:00PM - 3:00PM MT
FUTURE DIRECTIONS	**Future Directions** — *NASA Headquarters*	**TUES., AUG. 10** 9:00AM - 10:00AM MT
COORDINATING SUCCESSFUL EDUCATIONAL PROGRAMS	**Online Small-Sat Knowledge Repositories and Modeling Tools for Risk Reduction and Enhanced Mission Success** — *NASA Goddard Space Flight Center*	11:00AM 12:00PM MT
ADVANCED TECHNOLOGIES 1	**NASA SpaceCube Edge TPU SmallSat Card for Autonomous Operations and Onboard Science-Data Analysis** — *NASA Goddard Space Flight Center*	12:00PM - 1:00PM MT
PROPULSION	**A Comparison of the Technological Maturation of In-Space Propulsion Systems from 2018 to 2020** — *NASA Small Spacecraft Systems Virtual Institute*	2:00PM - 3:00PM MT

LIST CONTINUED ON PG 2

SPACE ACCESS	**NASA Science Mission Directorate Rideshare Office** — *NASA Headquarters*	**WED., AUG. 11** **9:00AM - 10:00AM MT**
GROUND SYSTEMS	**NASA Leveraging Commercial Communication Ground Stations for Small Satellites** — *NASA Goddard Space Flight Center*	**12:00PM - 1:00PM MT**
CONSTELLATION MISSIONS	**Design and Validation of an Autonomous Mission Manager towards Coordinated Multi-Spacecraft Missions** — *NASA Ames Research Center*	**2:00PM - 3:00PM MT**
ADVANCED TECHNOLOGIES 3	**Development of a COTS-Based Propulsion System Controller for NASA's Lunar Flashlight CubeSat Mission** — *NASA Marshall Space Flight Center*	**THUR., AUG. 12** **9:00AM - 10:00AM MT**
FUTURE MISSIONS/ CAPABILITIES	**Design and Overview of the Solar Cruiser Mission** — *NASA Marshall Space Flight Center*	**11:00AM - 12:00PM MT**
	Optical Time Transfer for Bistatic SAR Small Spacecraft — *NASA Ames Research Center; NASA Jet Propulsion Laboratory; NASA Goddard Space Flight Center*	**11:00AM - 12:00PM MT**

Swifty Sessions

PRE-RECORDED On Demand Talks

https://smallsat.org/conference/swifties

NO LIVE Sessions

COMMUNICATIONS	**Deployable Optical Receiver Array CubeSat Demonstration** — *NASA Jet Propulsion Laboratory*
PROPULSION	**Design and Optimization of Steering Laws for Geocentric Solar Sailing** — *NASA Langley Research Center; NASA Marshall Space Flight Center*
THERMAL	**The Active Thermal Architecture: Thermal Control for Small-Satellites** — *NASA Jet Propulsion Laboratory*

NASA Short Talks

PRE-RECORDED On Demand Talks

https://smallsat.org/conference/nasa short talks

NO LIVE Sessions

ACS3 – A 12U Solar Sail Technology Demonstration — *NASA Langley Research Center*

Framework for Autonomous Planning of Distributed Space Systems — *NASA Ames Research Center*

Let's Work Together: How Industry Can Help GSFC Achieve SmallSat Technology Goals — *NASA Goddard Space Flight Center*

NASA Flight Opportunities: Competitive Access to Suborbital Flight Testing — *NASA Ames Research Center*

NASA SSTP's SmallSat Technology Partnerships for Universities — *NASA Ames Research Center*

Novel Communication Experiments in the Nano-Orbital Workshop (NOW) Series, Closing the Link to Geostationary Orbit with Automated Doppler Correction — *NASA Ames Research Center*

Sabertooth Avionics - Improving SWaP, Cost, and Performance in Space Computing — *NASA Jet Propulsion Laboratory*

LIST CONTINUED ON PG 3

NASA Short Talks (cont.)

PRE-RECORDED On Demand Talks

https://smallsat.org/conference/nasa short talks

NO LIVE Sessions

Smart Technology for an Autonomous Future — *NASA Langley Research Center*

The SSRI Knowledge Base Tool: An Update and Future Plans — *NASA Goddard Space Flight Center*

Suborbital Flight Testing for SBIR/STTR Funded SmallSat Technologies — *NASA Ames Research Center*

How to Partner with NASA and Use Patented Technologies — *NASA Ames Research Center*

Long-Duration Wear Testing of the ASTRAEUS Hall Thruster: Overview & Status Update — *NASA Jet Propulsion Laboratory*

NASA Art in Space: A Rich History and the PACE-1 Flight Mission — *NASA Ames Research Center*

NASA Posters

https://smallsat.org/conference/posters/

GROUND SYSTEMS OPERATIONS	**NASA CubeSat/SmallSat Reference Model** — *NASA Goddard Space Flight Center*
	Navigation and Control Performance Utilizing Precision Formation Flying Along a Propellent Optimized Trajectory for the VTXO Mission — *NASA Goddard Space Flight Center*
INSTRUMENTATION	**BJTs in Space: ELDRS Experiment on NASA Space Environment Testbed** — *NASA Goddard Space Flight Center*
SPACE ACCESS	**Using the Decision Tree to Help Scientists Navigate the Commercial Access to Space (ATS) Options** — *NASA Goddard Space Flight Center*
SYSTEMS	**Model Based Systems Engineering for CubeSat Mission Reliability** — *NASA Johnson Space Center; NASA Jet Propulsion Laboratory*

NASA Exhibits

https://smallsat.org/exhibitors/exhibit hall

- NASA Ames Research Center Engineering
- NASA Game Changing Development Program
- NASA Jet Propulsion Laboratory
- NASA Goddard Space Flight Center / Wallops Flight Facility
- NASA Headquarters Space Technology Mission Directorate
- NASA Kennedy Space Center - Launch Services Program
- NASA Marshall Space Flight Center
- NASA Science Mission Directorate