

Small Satellite Capabilities and Technologies

Presentation by Catherine Venturini

Tuesday, November 15, 2022, 6:00
p.m., at the Proud Bird

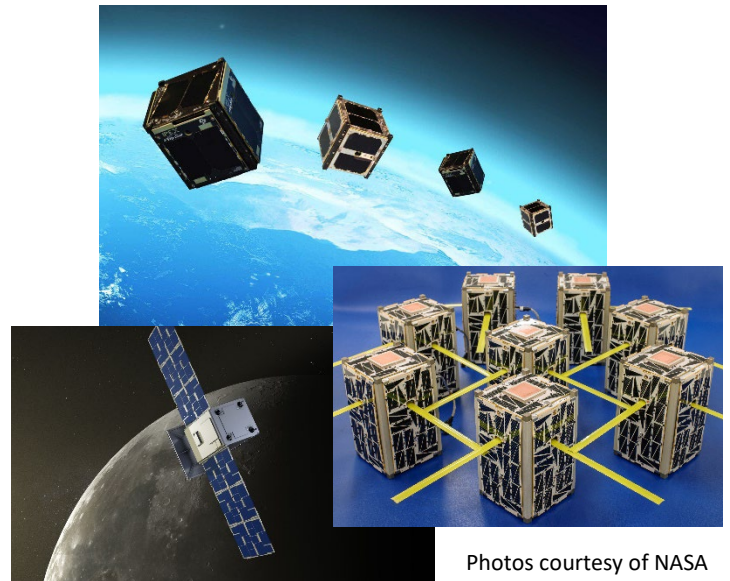
Dinner is Included

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Synopsis

A small satellite, miniaturized satellite, or smallsat is a satellite of low mass and size, usually under 1,200 kg. Satellites can be built small to reduce the large economic cost of launch vehicles and the costs associated with construction. Miniature satellites, especially in large numbers, may be more useful than fewer, larger ones for some purposes – for example, gathering of scientific data and communication relay. Originally developed in the academic world, today commercial industry has embraced the usage of small satellites and has changed the way we do business in space. The usage of commercial-off-the shelf parts and advancements in nanotechnology continue to increase mission capabilities.

The Aerospace Corporation has a rich history building and flying small satellites since the late 1990's. Leveraging the CubeSat platform provides an ideal low-cost, on-orbit testbed to push innovative technologies, conduct scientific research, and test the limits of miniaturization. This presentation will highlight some of the innovative missions and technology developments from the past, present, and future.



Photos courtesy of NASA

Our Speaker



Catherine Venturini is a principal engineer/scientist in the Enterprise Lab (Elab) under the Office of the Chief Technology Officer at The Aerospace Corporation. In this position, Venturini's

primary focus is on space mission architectures, strategic planning, and small satellite mission capabilities and technology advancements to support the interest of the corporation's major government customers in developing and prototyping future space systems.

Venturini received her bachelor's degree in physics from Loyola Marymount University, and her master's degree in physics from the University of Alabama in Huntsville. Venturini received the 2013 Aerospace Team of the Year Award, a Shaping the Future Pin Award in 2019, the 2020 Aerospace Corporate Innovation Team Award, and 2021 Aerospace Women of the Year.

Meeting Details

Date: Tuesday, November 15, 2022

Location: The Proud Bird Food Bazaar & Events Center – 11022 Aviation Blvd, Los Angeles, CA 90045 ([click here for map](#))

Ample free parking

Schedule: 6:00 Meet and Greet
(PM) 6:30 Dinner
7:00 Presentation
8:15 End

Cost: \$50 *Advance payment is required.*

Dinner Choices: Hors d'oeuvres, salad, main dish, dessert, and beer/wine/beverages included
Cost includes both food and presentation.

For additional information, contact us at: chair@sccavs.org

Reservations: You can (1) pay by PayPal to chair@sccavs.org, and email info requested in the Registration Form to chair@sccavs.org, or (2) snail mail a check payable to SCCAVS along with the filled in Registration Form. These must be *received by the deadline of November 5, 2022.*

Registration Form

Deadline: November 5, 2022. Pay by PayPal (to chair@sccavs.org), or check.

Send check to: SCCAVS, 616 Hartford Ave, Huntington Beach, CA 92648

For additional information, contact: info@sccavs.org

Check enclosed, payable to SCCAVS

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