

JOIN US FOR A  
**VIRTUAL**  
**STAR  
PARTY**

**FRIDAY, APRIL 23 • 6 - 8:30PM**  
**AT THE CANYON COUNTRY CAMPUS**

Guest speaker

**Jennifer Harris Trospen**

Mars 2020 Deputy Project Manager

**Perseverance on Mars, the  
First Two Months!**

- Mission update on the Mars Perseverance rover currently exploring Mars

[www.canyons.edu/ccc](http://www.canyons.edu/ccc)

For more information (661) 362-3800



# ABOUT THE SANTA CLARITA COMMUNITY COLLEGE DISTRICT

The Santa Clarita Community College District serves a 367-square-mile service area in northern Los Angeles County. College of the Canyons, the single college within the district, serves more than 25,000 students in a traditional year at campuses in Valencia and Canyon Country, as well as online. Located on a modern 153-acre campus in Valencia and 70-acre site in Canyon Country, the College offers classes during traditional fall and spring semesters, as well as summer sessions and five-week winter intersessions. Currently, COC offers more than 180 degrees and certificates, along with 40 bachelor's, master's and doctoral degrees available in the University Center from multiple partner institutions.

The Canyon Country Campus, which opened in 2007, has become known as a comprehensive campus that offers high-quality instructional programs, supportive student services and meaningful community partnerships. Since 2007, the campus has offered nearly 8,000 classes and served more than 65,000 students. Although current facilities consist primarily of modular buildings, the campus is poised to transform with new permanent structures. In January 2018, the campus broke ground on a new Science Center—the first of multiple building complexes planned in the future to dramatically expand campus opportunities and pathways for students and the community. Construction continues on the Science Center, which is expected to be completed in 2021, and will provide 55,000 square feet of new space for high-demand instructional programs.

College of the Canyons has maintained its status over the years as one of the largest employers in the Santa Clarita Valley and is a vital, enduring, cultural, educational, and economic force in the region. The Canyon Country Campus contributes to this educational work and community impact.

## **COLLEGE OF THE CANYONS CANYON COUNTRY CAMPUS**

17200 Sierra Highway, Santa Clarita, CA 91351

(661) 362-3800 | [www.canyons.edu/ccs](http://www.canyons.edu/ccs)

# EVENT AGENDA



6 – 6:10pm

## **Opening Remarks**

Dr. Ryan Theule, Campus Vice President, and Mr. Anthony Michaelides, Campus Dean

6:10 – 6:15pm

## **Guest Speaker Introduction**

Anthony Michaelides, Campus Dean

6:15 – 6:55pm

## **“Perseverance on Mars, the First Two Months!”**

Guest Speaker: Jennifer Harris Trosper, Mars 2020 Deputy Project Manager

6:55 – 7:10pm

## **Q & A**

7:10 – 7:35pm

## **The Night Sky**

Dave Flynn, The Local Group Astronomy Club of SCV

7:35 – 7:45pm

## **Q & A**

7:45 – 8:00pm

## **Adventures in 21st Century Observational Astronomy – How We Managed Labs During the Time of COVID-19**

- Dr. Christine Hirst Bernhardt, Astronomy Faculty, College of the Canyons
- Dr. Peregrine McGehee, Astronomy Faculty, College of the Canyons

8:00 – 8:10pm

## **Q & A**

8:10 – 8:25pm

## **Update From the COC Aerospace & Sciences Team**

8:25 – 8:30pm

## **Closing Remarks**

**Thank you for joining us!!**

# SPECIAL GUEST SPEAKER



## **Jennifer Harris Trosper** **Mars 2020 Deputy Project Manager**

Jennifer is the Deputy Project Manager for the Mars 2020 Perseverance rover. She currently manages the surface operations on Mars. She has worked on the Perseverance rover since 2015

during which she had several jobs including leading the systems engineering organization, the V&V program and the operations organization. In these roles, she was responsible for project related development work including Surface Flight Software, Ground Software, V&V, and Operations Readiness for the February 2021 landing.

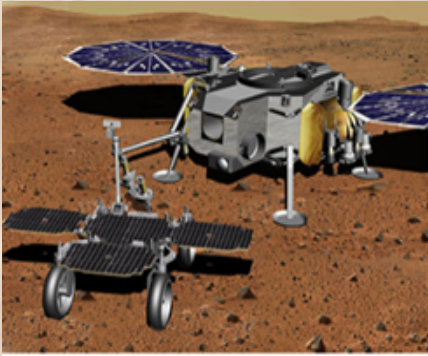
Jennifer has had the privilege of working on every rover that has ever driven on Mars. She also worked on other JPL missions (Cassini, SMAP, R&TD) as well as at NASA HQ in Washington.

### **Her key roles have been:**

- **Cassini** – Attitude Control Ops Engineering
- **Mars Pathfinder** – Attitude and Information Management Testbed and OPs Engineer, Flight Director
- **Mars Odyssey** – Operations Development Manager
- Mars Exploration Rovers – Project System Engineer and Mission Manager
- **Curiosity** – Deputy Mission Manager and Deputy Project Manager
- **Perseverance** – Mission System Development Manager, Project Systems Engineering Lead, Integrated Systems Engineering Lead and Deputy Project Manager

Jennifer's awards include: 2013 named JPL Fellow in Mars rover surface operations, 2013 NASA Exceptional Achievement Medal for Curiosity operations work, 2013 "Breaking the glass Ceiling" California Legislature award recipient. She was also invited to march in the 2013 Inaugural parade alongside the Curiosity rover float in recognition for her work on the mission.

# MARS MISSION: THEN AND NOW



Images are plentiful from NASA's most recent rover, Perseverance. [Click here](#) to view the Mars Perseverance Raw Image of the Week, like this one.

Viking 1 & 2 (orbiter & lander) landed on Mars in 1975. These landers were very different from current Mars rovers. The NASA Viking landers could not move around! The Viking landers settled

on the surface of Mars, collected data, and took photos for a time. NASA's Pathfinder mission landed on Mars in 1997 and included the first robotic rover, Sojourner, which was the size of a large toaster oven with wheels. These first missions were important to the evolution of the Mars rover vehicles.

In 2004, the first modern day rover vehicles, Spirit and Opportunity, landed on Mars. Spirit and Opportunity are twin rovers, each the size of a very small car with significantly improved maneuverability compared to early landers. Spirit travelled 4.8 miles across Martian plains and Opportunity drove 28 miles! All early rovers landed encircled by airbags, bouncing across the surface until coming to rest.

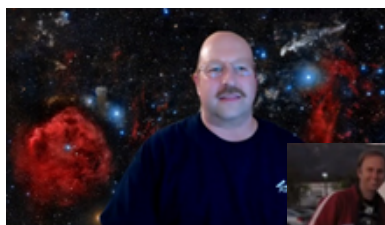
Curiosity was the first rover to land via sky crane and this rover has been exploring Mars since 2011. NASA's Curiosity is still exploring Mars and you can see where it is today by [clicking here](#). NASA's Perseverance rover was lowered to the Martian surface with a sky crane on February 18, 2021, after the InSight lander, which is basically a huge drone, found a suitable landing site. You can follow the Perseverance rover by [clicking here!](#) For current and future mission information, visit [mars.nasa.gov](https://mars.nasa.gov).

*"It takes years of design, manufacturing, coding, and testing systems for any space flight mission, and all spaceflight missions need a team of dedicated people to complete the variety of tasks associated with launching something into space. Years of teamwork culminates in a launch, and if all goes well, the attainment of new knowledge from a successful launch and data acquisition."*

- By Teresa Ciardi

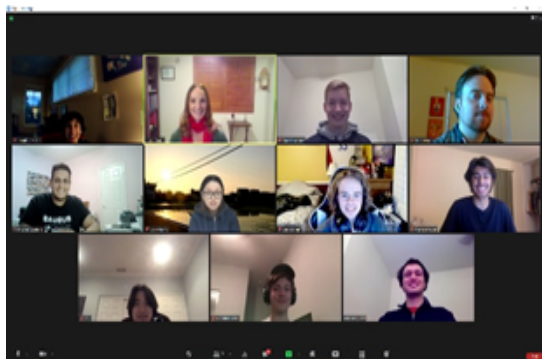


## THE LOCAL GROUP ASTRONOMY CLUB OF SANTA CLARITA VALLEY



Virtual presentations lead by Dave Flynn and other members of the Club. Enjoy their equipment, and some of their best photos of the night sky.

## COLLEGE OF THE CANYONS AEROSPACE & SCIENCES TEAM



College of the Canyons Aerospace & Sciences Team competes with university teams and has been successfully selected multiple consecutive years for space flight missions on NASA student platforms, like NASA HASP and NASA RockSatX. Contact Teresa Ciardi for more information.

# CANYON COUNTRY CAMPUS SCIENCE CENTER

Continued construction of the new 55,000-square-foot Science Center points to the promising future of the Canyon Country campus. When it opens for classes in 2021, the four-story structure will contain as much laboratory science as is currently available at the Valencia campus. It is situated at what will become the center of campus on Dr. Dianne G. Van Hook Drive, a campus road named in 2018 to honor the Chancellor's 30+ years of service to College of the Canyons. Also taking shape is a new terraced amphitheater that will provide student instruction and gathering space. The outdoor plaza will be book-ended by the Science Center and the future Student Services & Learning Resources Center, which is currently under construction to the south of the Science Center.



Our sincere **THANKS** to all who  
made this evening possible!

**Jennifer Harris Trosper**

Mars 2020 Deputy Project Manager

**The Local Group Astronomy Club of  
Santa Clarita Valley**

**Dr. Christine Hirst Bernhardt and  
Dr. Peregrine McGehee**

COC Astronomy Faculty

**The COC Aerospace and Sciences Team**

**Chancellor Dr. Dianne G. Van Hook**

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Board of Trustees**

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