



**Unlock the mysteries of
space exploration!**

2021 STEM Summit: Galactic Quest Agenda at-a-Glance: September 17 – 19, 2021

The 2021 4-H STEM Summit will be conducted virtually September 17-19. Participants will have the opportunity to connect with peers from around the nation to learn and discover together. The schedule will allow for instruction/discussion online and offline time to complete activities. Participants will receive a summit box with materials to support experiential learning throughout the Summit.

All sessions will be virtual. Times listed below are Eastern Standard Time.

Friday, September 17, 2021

Introduction to the purpose of the STEM Summit. Primary activities that look at why we explore space and tools of exploration.

6:30 – 6:45 pm: Welcome

Freeman Thompson, Director of Educational Opportunities, National 4-H Council

6:45- 7:00 pm: Youth in Action Award Winner Presentation

Aiden Spencer, Youth in Action Award Winner, STEM Pillar



The 2021 STEM Summit will kick off with 4-H Youth in Action Award Winner Aidan Spencer. His message will inspire 4-H youth that they can lead out to build STEM in their communities.

7:00 – 7:45 pm: Strange New Planet

Smaller groups will break out to look at the motivations of why we explore space and learn the strategies used to explore space. They will try first-hand as they use their Stellar Optics telescope from the 2021 STEM Challenge kit.

7:45 – 8:30 pm: Space Sail Design Challenge

The first of the Summit Design Challenge, the “Space Sail Challenge” will be introduced. Using materials in the STEM Summit Kit and household supplies, youth will build a model of the space sail to be presented on Saturday morning.

Saturday, September 18, 2021

Saturday activities will take Summit participants deeper into the galaxy as they investigate living in space for the long haul, including building a new planet habitat.

11:00 - 11:30 am: Welcome & Space Sail Design Share

Dave Francis, Utah State University, Director of 4-H/Youth & Extension Professor

11:30 – 1:30 pm: Virtual Space Mission

InfiniD Staff

STEM Summit participants will receive their assignment onboard a virtual spaceship, working as a team to complete a mission to solve space travel challenges. In this mission, youth will be managing a Mars Mission supply chain delivery. A routine mission goes awry and problem solving ensues.

1:30 – 3:00 pm: Lunch Break

3:00 – 3:45 pm: Space Life Skills

Living in space isn't just a physical challenge. Participants will explore the obstacles and strategies for dealing with the social and emotional issues associated with living in space.

3:45 – 4:45 pm: TinkerCad Space Settlement Design

Mark DeMorra, University of Maryland, Extension Educator

Participants will use TinkerCad, a free, 3-D modeling program to design their own galactic station online.

4:45 – 5:30 pm: Growing Food in Space



5:30 – 6:00 pm: Mission Debrief

As we close out Day 2 of the 4-H STEM Summit, participants will reflect on the activities and review tasks needed to be completed before the STEM Summit resumes the next day. Participants will be challenged to complete the Cosmic Claw Challenge.

Sunday, September 19, 2021

11:00 - 11:30 am: Welcome

Dave Francis, Utah State University, Director of 4-H/Youth & Extension Professor

11:30 – 12:30 pm: Career Panel Discussion

Facilitated by Freeman Thompson, Director of Educational Opportunities

Invited Panelists include:

- *Austin Marshal, SpaceX, 4-H Alum*
- *Tom Pennell, Cornell University*
- *NASA Mars Rover Team*

12:30 – 1:15 pm: Lunch Break

1:30 – 2:45 pm: InfiniD Mission

InfiniD Staff

Participants will travel to a far-off planet to investigate problems citizens of the planet are having in their second mission on Mars. A visit to the planet will look at the causes of extreme weather and climate.

2:45 – 3:00 pm: Wrap Up

A final debrief and a challenge to start the process of making a plan to extend the 4-H STEM and more throughout the next 4-H year.

