

The Ad Astra Kansas Foundation presents

# Galaxy Forum 2023

**Sat. Aug. 26, 1-3 p.m.**

**At the Cosmosphere**

11th & Plum Streets.  
Hutchinson, KS

Free—Open to the public

To register for in-person attendance: [contact@adastra-ks.org](mailto:contact@adastra-ks.org) w/ name & # attending

Also livestreamed on AAKF facebook page



## SPEAKERS

### PLANETS & STARS from the GROUND & SPACE: *Research at KU ExoLab*

**Jonathan Brande** is a 4th year PhD candidate in physics / astronomy at the University of Kansas, working with Dr. Ian Crossfield. Brande studies exoplanets, planets orbiting other stars using space telescopes like Hubble and JWST. At KU he has been at the forefront of exoplanet astrophysics, including leading the discovery of water vapor in the atmosphere of exoplanet TOI-674 b. (150 light-years away from Earth)



He was also part of the JWST Transiting Exoplanet Community Early Release Science Team, observing the planet WASP\_39 b, (700 light-years from Earth). Before KU, he worked as a research assistant at NASA Goddard Space Flight Center, helping to discover exoplanets with NASA's TESS mission.

**ECLIPSING SUNS:** October 14, 2023, and April 8, 2024, will bring solar eclipses—the last ones visible in the U.S. until 2044. NASA Eclipse Ambassador Charles Rivera from the Kansas Astronomical Observers Club, assisted by WSU undergrad Ed Bierens, will give a presentation. The team brings with them models, displays and materials. The mission is to prepare communities to enjoy the science and wonder of this natural phenomenon.



### ASTERIODS: An Ancient World and a Metal World

**Sarah Lamm** is a PhD student in geology at KU studying aqueous minerals (formed from the ions in precipitating water) with Raman spectroscopy (a technique using light to identify the chemical structure and properties of aqueous minerals.)

This after graduating with a master's in geology from K-State in 2021, having previously earned triple bachelor of science degrees in chemistry, geology and geography there in 2018. As an undergrad, she was a team member studying Mars Curiosity Rover data and work at Los Alamos National Lab for three summers. She interned at NASA JPL in 2021 and 2022 studying iron minerals with lasers.



Lamm is also a NASA Solar System Ambassador (SSA). Her goal is to work for NASA or another national lab researching Mars and / or Titan, Saturn's largest moon.

**KANSAS INTERSTELLAR** —Ad Astra Kansas Foundation has a new project—to have an annual Kansas science day designated by the legislature. Hear about that and an update on our interstellar university project.

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The Ad Astra Kansas Foundation, founded in 2001, is a 501c3 organization which focuses on promoting space science and education in Kansas. [www.adastra-ks.org](http://www.adastra-ks.org)