

The Ad Astra Kansas Foundation

Invites you to the

## 2022 Galaxy Forum

**Sat. Aug. 27, 1-3 p.m.**

At the Cosmosphere  
11th & Plum Streets.  
Hutchinson, KS

Free—Open to the public

To register for in-person attendance [HERE](#)  
Event will also be streamed on [AAKF facebook](#)



Images: NASA Illustrations

## Voyager to Artemis— AAKF Galaxy Forum 2022



### “Voyager 1 and 2: Humanity’s Most Distant Explorers.”

Todd Barber is a JPL senior propulsion engineer who, amongst other duties, is now supporting the Voyager mission more than 40 years after its launch. As he did in 2017 when he gave our Galaxy Forum an insightful presentation about Cassini’s programmed “plunge” into Saturn, Barber will give us a deep look into those intrepid Voyagers.

Barber spent two decades as lead propulsion engineer on Cassini’s mission to Saturn. He also worked on the Mars Exploration Rover (MER) mission (Spirit and Opportunity) and the Mars Science Laboratory (MSL) mission, which landed the Curiosity rover on the red planet in 2012.

Barber, a Wichita native, also worked as the lead impactor propulsion engineer on Deep Impact, which successfully crashed into Comet Tempel-1 in 2005, at 23,000 mph. Todd recently completed working on the Dawn mission, an ion propulsion mission to the two largest main-belt asteroids, Vesta and Ceres. He was the Mars2020 propulsion lead engineer for operations.

The MIT graduate has worked on the Jupiter--orbiting Galileo project, the Space Infra-Red Telescope Facility (SIRTF) mission and the Stardust mission, as well as the Mars Sample Return mission and a Mars airplane study. Todd received NASA’s Exceptional Achievement Award in 1996 for his work on Galileo. And NASA’s Exceptional Public Service Medal in 2018 for heading up Cassini’s propulsion team for nearly two decades.



### “DART—A Targeted Mission.”

Launched in November 2021, in September of 2022 the DART spacecraft will attempt to redirect an asteroid’s path through kinetic impact. This is considered a “planetary defense mission” test. The target is the asteroid Didymos and its moonlet Dimorphis. Physicist Dr. Paul Adams, Director of the Fort Hays State University Science and Math Education Institute and JPL NASA Solar System ambassador will inform us.



“**Summer Around the MOON**” At least moon three orbiters are being launched this summer—the recently launched Capstone—a lunar orbiter testing the orbit path planned for the Artemis’ Lunar Gateway space station and, scheduled for August, the Artemis 1 unmanned and KPLO, a joint Korean and Nasa orbiter mission to test technology and survey for useful lunar resources. Speaking will be Steve Durst. Durst has been editor and publisher of Space Age Pub-

lishing Company since 1976, with offices in California and Hawai'i (1988). He is Director of the International Observatory Association, (ILOA) based in Hawai'i. The ILOA plans to conduct galaxy imaging and astronomy from the Moon with its ILO-X precursor instruments scheduled for launch aboard Intuitive Machines' Nova-C lunar lander in 2023.



**“Mars update”**— Invited is Sarah Lamm— Lamm is a master’s student in geology at Kansas State University who has interned with Mars rover data since 2016. She will update us on Perseverance and Intrepid. The Colby native is a NASA Solar System Ambassador with a deep resume of outreach and research. And has presented previously at the Galaxy Forum.



**“Interstellar Seminar”**-- Dr. Mark Schneegurt is a professor of Biology at Wichita State University. His astrobiology research focuses on microbes in extreme environments as analogs for life detection missions and planetary protection of celestial bodies. Dr. Schneegurt is leading a new course at WSU in Spring 2023, LASI 150G Interstellar Seminar. He will speak about the idea behind, approach to, and relevance of this hybrid course for the interstellar community.

