

Voyager 1



## AIAA Zoom Section Meeting

**Thursday, March 18, 2021**

**Todd Barber**

**AIAA Distinguished Lecturer**

**Senior Propulsion Engineer**

**Jet Propulsion Laboratory**

## **"Voyager 1 & 2: Humanity's Most Distant Explorers"**

**Location: Zoom Meeting online**

**Link will be sent to those who register**

**Time: 6:30 PM Social Time**

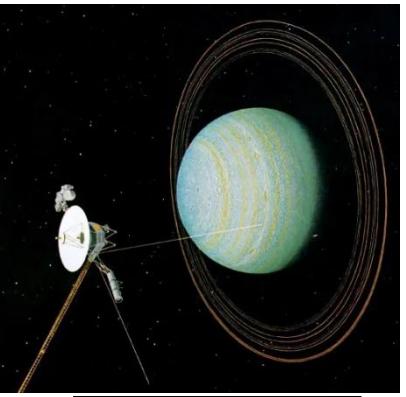
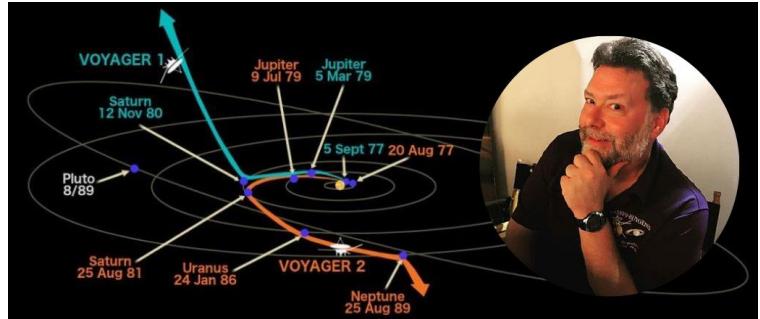
**7:00 PM Presentation**

**Cost: Free for Everyone**

### **RESERVATIONS REQUIRED**

**Please RSVP by March 17, 2021**

**[davidsparis@tvc.com](mailto:davidsparis@tvc.com) or (516) 458-8593**



Voyager 2 at Uranus

The Voyager missions to the outer planets and interstellar space will be discussed in detail. Topics to be discussed include the incredible opportunity for a "grand tour" of the outer planets encountered only every 176 years and some pictures from the first ever encounters with Jupiter, Saturn, Uranus, and Neptune. The subsequent interstellar mission and current status will also be highlighted as well, particularly the challenges of flying two geriatric spacecraft with a tiny flight team. Finally, the future of the mission and the Voyager Golden Record will be featured in some detail.

Todd Barber is a JPL senior propulsion engineer, who worked as lead propulsion engineer on the Cassini mission to Saturn following part-time work on the Mars Exploration Rover (Spirit and Opportunity) mission, Deep Impact mission (as lead impact propulsion engineer), and the Mars Science Laboratory (MSL) mission, which landed the large rover Curiosity on the red planet in 2012. Cassini was launched in 1997 on its two-billion mile, seven-year journey to the ringed planet. Twin rovers were launched to the red planet in June and July of 2003, and Opportunity is still going strong over nine years after landing. Todd also worked as the lead impactor propulsion engineer on Deep Impact, which successfully crashed into Comet Tempel-1 in 2005, at 23,000 miles per hour. Mr. Barber worked on the Galileo project for over seven years and his primary responsibility was getting Galileo into Jupiter orbit in 1995 for which he received NASA's Exceptional Achievement Award in 1996. Todd also worked part-time on the Space Infra-Red Telescope Facility (SIRTF) mission and on the Stardust mission, the Mars Sample Return mission, a Mars airplane study, and the Deep Space One Mission, the first NASA mission to use electric propulsion. This mission included flybys of a near-Earth asteroid, Braille, and a comet named Borrelly. Mr. Barber is a native of Wichita, Kansas, and attended MIT between 1984 and 1990, obtaining B.S. and M.S. degrees in aerospace engineering, with a humanities concentration in music, and has been with JPL since graduating in 1990. He composes church choral music, with two pieces published to date. His hobbies include singing charitably and professionally, playing the piano, visiting all the U.S. tri-state corners and national parks, playing basketball, and amateur astronomy.

**Directions:** Click on the link in the meeting invitation you will receive after signing up for the meeting.