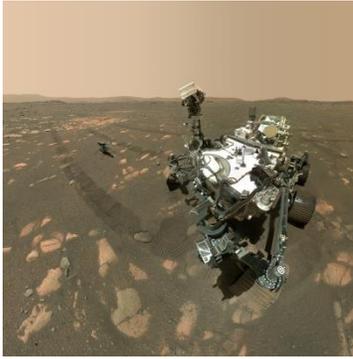


AIAA and ASME **ZOOM** Meeting  
Thursday, September 16, 2021 at 0600 PM to 0800 PM

**How to drive a rover on Mars and other useful skills for an itinerant space traveler**  
**Mr. Evan Hilgemann**

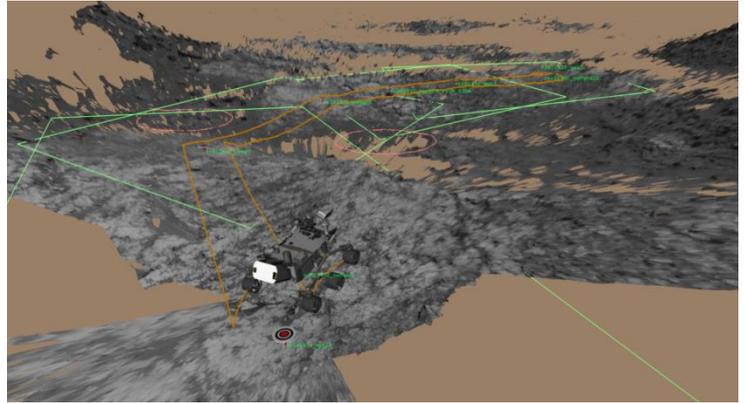


NASA's Mars rovers have been a hallmark of planetary exploration efforts for over 25 years, and all 5 of them have been built and operated by JPL in Pasadena, CA. To safely operate these long duration missions and maximize science output, JPL uses a sophisticated suite of tools that combine 3D visualizations, command sequencing, and error checking.

In this talk, we'll take a look at the motivations for exploring Mars, the toolset used to drive a Mars rover, and the

particular set of instruments and technologies the rovers carry to enable navigating unknown terrain.

We'll also cover what the Perseverance rover has been up to in its first 6 months on the red planet including sampling activities and the successes of the Ingenuity helicopter.



*Evan Hilgemann is a mechanical engineer at NASA's Jet Propulsion Laboratory. He currently splits his time between operating the Mars rover Curiosity and designing structural components for the SPHEREx space telescope. Previously, he has contributed to spacecraft designs and technologies ranging from a shoebox sized SmallSat to a 100 foot diameter deployable system. Evan holds a B.S. in Mechanical Engineering from the University of Nebraska and an M.S. in Aerospace Engineering from the University of Michigan. In addition to his day job, Evan is a telescope operator at the Griffith Observatory and publishes Explore and Observe, an online newsletter covering the latest in modern day exploration of Earth and space.*

**AIAA – ASME ZOOM Meeting**  
**Thursday, September 16, 2021**  
**0600 PM – 0800 PM**

**0600 – 0630 pm – Welcome and Introductions**  
**0630 - 0800 pm – JPL Presentation / Q&A**

Click the following link to register for this exciting Zoom Meeting. Once registered, you will receive an email with URL link and Meeting ID for our ZOOM meeting.

[JPL Rover - Meeting Registration - ZOOM](#)

Just in case: Meeting ID: 955 4364 0434  
Passcode: 743703

If you choose to call into the meeting:  
1 669 900 9128 US (San Jose)  
888 475 4499 US Toll-free  
877 853 5257 US Toll-free