

AIAA San Gabriel Valley Seminar
October 25, 2021 at 12 noon, PST
RSVP online: <https://tinyurl.com/aiaasgv>



Mars Helicopter Ingenuity
The Challenges of Flying On Another Planet

Abstract: This talk will focus on the Mars Helicopter Ingenuity, a 1.8-kg vehicle that in April 2021 became the first controlled and powered aircraft to fly outside of Earth's atmosphere. Since then, Ingenuity has performed 13 flights on Mars, covering approximately 2.9 km while taking images of previously unexplored terrain. Dr. Grip will discuss the challenges of developing a helicopter capable of operating in the Martian environment, where the atmospheric density is only ~1% of the density on Earth, and operating it from several hundred million kilometers away.



Speaker Bio: Håvard Fjær Grip received his MSc and PhD in Engineering Cybernetics from the Norwegian University of Science and Technology in 2006 and 2010, respectively. Prior to joining JPL in 2013, he performed research and development work at the SINTEF Research Group in Trondheim, Norway; Daimler AG in Stuttgart, Germany; and Washington State University in Pullman, Washington. He led the development of Ingenuity's Flight Control system and is currently the helicopter's Chief Pilot.