

DEPARTMENT OF MECHANICAL ENGINEERING

WILLIAM MAXWELL REED SEMINAR SERIES

“The Dragonfly Entry and Descent System.”

Michael Wright, NASA Ames Research Center

August 24th, 2021

Presentation Abstract

Dragonfly is a New Frontiers class mission that will send a nuclear powered octocopter to the surface of Titan for an extended science mission. The spacecraft will launch in 2027 and arrive at Titan in 2034. This presentation will provide an overview of the Entry and Descent system that is under development to ensure the safe delivery of this unique “relocatable lander” to Titan, with an emphasis on some of the key technical challenges that the team is addressing.

Speaker Bio

Michael Wright received his PhD from the University of Minnesota and has worked at NASA Ames Research Center since then, specializing in Entry, Descent and Landing technologies, aerothermodynamics, and thermal protection systems. He is the primary developer of the aerothermodynamics code “DPLR”, 2007 NASA software of the year, and has supported EDL for many flight missions, including Orion, MSL, Stardust, Phoenix, and Huygens. Michael is the Project Scientist for the Entry Systems Modeling Project, and serves concurrent roles as the deputy lead for the Agency EDL Strategic Capabilities Leadership Team and the EDL Phase-Lead for the Dragonfly mission to Titan.

Date: Tuesday, August 24, 2021

Time: 3:30PM EST

Place: DMB 101 James F. Hardyman Theater

Contact: Dr. Alexandre Martin 257-4462

Attendance open to all interested persons