You are cordially invited to the Mechanical Engineering Seminar:

**Speaker:**
David A. Levinson, Maxar Space Infrastructure, Palo Alto, CA

**Date:** February 26, 2020

**Time:** 4:00-5:00 p.m.

**Location:** Bergin 116

**Title:** The Art of Dynamics

**Abstract:**
Mechanics, of which dynamics is a major part, is the oldest of the mathematical sciences, dating back to antiquity, and was the driving force behind the Scientific Revolution and the Enlightenment, as well as all of modern science. After establishing a historical context for his work, Mr. Levinson will discuss how he became interested in dynamics, the technical issues in dynamics he has faced during his lifetime, and how the subject has evolved over the past several decades.

**Biography:**
David Levinson has 43 years of experience as a dynamicist in the space industry, where he has been responsible for producing special purpose computer programs for predicting motions of complex mechanical systems, such as multibody spacecraft, robotic devices, and aerospace mechanisms. Mr. Levinson has been a member of the Dynamics and Controls Analysis group at Maxar Space Infrastructure (formerly Space Systems/Loral) since 2013. Over the years, he has been the recipient of numerous engineering awards, among them the American Institute of Aeronautics and Astronautics (AIAA) San Francisco Section Outstanding Young Engineer Award, the AIAA San Francisco Section Engineer of the Year Award in Astronautics, the AIAA San Francisco Section Engineering Educator of the Year Award, the American Society of Mechanical Engineers (ASME) Santa Clara Valley Section Distinguished Mechanical Engineer Award, the American Astronautical Society Outstanding Achievement Award, and the Lockheed Missiles and Space Company President’s Award. Mr. Levinson is the author or coauthor of 43 published technical papers, and a coauthor of the two McGraw-Hill textbooks, *Spacecraft Dynamics* and *Dynamics: Theory and Applications*. He is a coauthor of four desktop-published mechanics textbooks and recently has released a new undergraduate text entitled *Dynamics for Engineering Analysis*.

Mr. Levinson is a Fellow of both the American Astronautical Society and the ASME, and is an Associate Fellow of the AIAA. As a participant in the Discover “E” K-12 engineering outreach program for more than 20 years, he has given 270 classroom presentations to middle school and high school students and teachers about careers in engineering. He is a popular speaker, and was an ASME Distinguished Lecturer from 2000 through 2004. For more than forty years he has lectured on technical subjects to a wide variety of audiences, including Cub Scouts, fifth graders, swimming coaches, middle school and high school students, school teachers, Kiwanis and Rotary clubs, physicians, practicing engineers, engineering graduate students, and university professors.