DEPARTMENT OF MECHANICAL ENGINEERING
WILLIAM MAXWELL REED SEMINAR SERIES

"How Systems Engineering Leads to Mission Success, A Ball Aerospace Perspective"

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Abstract: As both a spacecraft and payload developer, Ball Aerospace has a unique understanding of instrument integration and experience delivering end-to-end systems. In order to be able to do, systems engineering is a key discipline for all of our programs. But what does that actually mean? What do Ball systems engineers do on a day-to-day basis? This talk will provide an overview of Ball, some of our best known programs (Hubble Instruments, the planet finder Kepler, and the JWST primary optics), and how systems engineering insured success on these programs. The tools of systems engineering, the skills of systems engineers, and the interaction of systems engineering with technical disciplines at all phases of space system programs will be discussed.

Bio: Dr. Jeanette Domber is a principal mission systems engineer for Ball Aerospace & Technologies Corp. in Boulder, CO, where she has been since March of 2005. She currently supports the Civil Space Business unit as the technical manager on several pursuits, which recently include serving as the Chief Systems Engineer for the WFIRST Wide Field Instrument Phase A study and proposal. Prior to that, Dr. Domber was the payload manager for IXPE, a small X-ray telescope explorer, selected by NASA in January 2017 for flight. She has also been the program manager for several projects, including the Ball Aerospace Flash LIDAR efforts and the Membrane Optic Imager Real-Time Exploitation (MOIRE) program, sponsored by DARPA, to explore the possibility of designing, building, and launching large, diffractive membrane optics for earth observation. Jeanette has taught two Aerospace Engineering Sciences classes at the University of Colorado at Boulder as a senior instructor. She is an AIAA Associate Fellow, a member of the Structures Technical Discipline Team for the NASA Engineering & Safety Center, and attended the National Academy of Engineering's invited Frontiers of Engineering Symposium. Jeanette's background is in the mechanics and dynamics of precise structures, having received her Ph.D. in 2004 from the University of Colorado at Boulder. Her research focused on the impact of material nonlinearities on the design and stability of large optical deployable structures.

Date: February 9, 2018
Time: 3PM
Place: CB 122
Contact: Dr. Alexandre Martin 257-4462

Meet the speaker and have refreshments
Attendance open to all interested persons

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