



## Seminar



### Mary "Missy" Cummings

Professor  
Director of Humans and Autonomy Lab (HAL)  
Duke University

### Drones & Driverless Cars: New Frontiers in Human-Technology Interaction

Allocating roles and functions between the human and computer is critical in defining efficient and safe systems, especially in transportation domains. This presentation will outline how to conceptualize and leverage the strengths and limitations of both humans and computers such that humans harness the raw computational power of computers, but also allow them the latitude to apply inductive reasoning for potentially creative, out-of-the-box thinking. Successful systems of the future will be those that combine the human and computer as a team instead of simply replacing humans with automation. Thus it is critical for autonomous system designers to understand the design space for human-computer collaboration.

**Friday, October 7, 2016**  
**3:00 – 4:00 pm**  
**CU Fiske Planetarium**

#### Biography:

**Mary (Missy) Cummings** received her B.S. in Mathematics from the US Naval Academy in 1988, her M.S. in Space Systems Engineering from the Naval Postgraduate School in 1994, and her Ph.D. in Systems Engineering from the University of Virginia in 2004. A naval officer and military pilot from 1988-1999, she was one of the Navy's first female fighter pilots. Cummings is currently a Professor in the Duke University Pratt School of Engineering, the Duke Institute of Brain Sciences, and is the director of the Humans and Autonomy Laboratory and Duke Robotics. Her research interests include human-unmanned vehicle interaction, human-autonomous system collaboration, human-systems engineering, public policy implications of unmanned vehicles, and the ethical and social impact of technology. See <http://robotics.pratt.duke.edu/research> for info on HAL.