



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

DEPARTMENT  
OF INDUSTRIAL ENGINEERING



Jay W. McMahon, Associate Professor, University of Colorado Boulder, USA

**Room 1.1 - December 16th : 11 a.m.**

Navigating spacecraft around asteroids poses some unique challenges due to the complex dynamical environment created by the relatively weak gravity of the small body. In this talk I will review this environment and discuss how previous missions have operated in this environment, focusing on OSIRIS-REx. Then I will provide some insights about the plans for the Emirates Mission to the Asteroid belt (EMA) which will go to the main-belt asteroid Justitia.

**Participation is free. You are welcome!**

### **The Speaker**

Jay McMahon is an Associate Professor in the Ann and H.J. Smead Aerospace Engineering Sciences department at the University of Colorado Boulder. His research focuses on autonomy, guidance, navigation, and control for spacecraft, along with the governing dynamics for these systems. He has especially focused on applications to small bodies. He was a Participating Scientist for the DART Mission, and was on the science teams investigating gravity science for NASA's OSIRIS-REx and JAXA's Hayabusa2 missions.