




A.D. 1308
unipg
DIPARTIMENTO
DI INGEGNERIA

CICLO DI SEMINARI DI AUTOMATICA E ROBOTICA

 DIPARTIMENTO DI INGEGNERIA
Aula 10

Control System Techniques in Aerospace and Smart Grids 31/01/2023 - 10:00

Guests

Prof. Gianni Bianchini

Prof. Antonio Giannitrapani

Prof. Andrea Garulli

Systems and Control Group

Department of Information Engineering and Mathematics

Università degli Studi di Siena

Talk #1: Model Predictive Control for Spacecraft Rendezvous

The quest for autonomy is a pervasive aspect of many upcoming space missions involving complex operations such as rendezvous, docking and formation flying. In this context, a technology which has gained increasing attention is Model Predictive Control. The talk will discuss the latest developments in this area and outline future research directions.

Talk #2: Algorithms for Smart Grid Planning and Operation

The talk will outline recent results for several smart grid problems, including planning and operation of energy storage systems in active distribution networks, local energy markets for community microgrids, optimal control of building heating systems.